



P1618P2C2 sequence listing.txt

Sequence Listing

RECEIVED  
SEP 30 2003  
TECH CENTER 1600/2900

<110> Chen, Jian  
Goddard, Audrey  
Gurney, Austin L.  
Hillan, Kenneth  
Pennica, Diane  
Wood, William I.  
Yuan, Jean

<120> Secreted and Transmembrane Polypeptides and Nucleic  
Acids Encoding the Same

<130> P1618P2C2

<140> US 09/904,553  
<141> 2001-07-13

<150> US 09/665,350  
<151> 2000-09-18

<150> PCT/US00/04414  
<151> 2000-02-22

<150> PCT/US98/18824  
<151> 1998-09-10

<150> US 60/062,285  
<151> 1997-10-17

<160> 424

<210> 1  
<211> 1825  
<212> DNA  
<213> Homo Sapien

<400> 1  
actgcacctc ggttctatcg attgaattcc ccggggatcc tctagagatc 50  
cctcgacctc gacccacgcg tccggggccgg agcagcacgg ccgcaggacc 100  
tggagctccg gctgctcttt cccgcagcgc taccgccat gcgcctgccg 150  
cgccggggccg cgctggggct cctgccgctt ctgctgctgc tgccgcccgc 200  
gccggaggcc gccaaagaagc cgacgccctg ccaccggtgc cgggggctgg 250  
tggacaagtt taaccagggg atggtggaca ccgcaaagaa gaactttggc 300  
ggcgggaaca cggcttggga ggaaaagacg ctgtccaagt acgagtccag 350  
cgagattcgc ctgctggaga tcctggaggg gctgtgagag agcagcgact 400  
tcgaatgcaa tcagatgcta gaggcgcagg aggagcacct ggaggcctgg 450  
tggctgcagc tgaagagcga atatcctgac ttattcgagt ggttttgtgt 500  
gaagacactg aaagtgtgct gctctccagg aacctacggt cccgactgtc 550

P1618P2C2 sequence listing.txt

tcgcatgccca gggcggatcc cagagggcct gcagcgggaa tggccactgc 600  
agcggagatg ggagcagaca gggcgacggg tcctgccggt gccacatggg 650  
gtaccagggc ccgctgtgca ctgactgcat ggacggctac ttcagctcgc 700  
tccggaacga gacccacagc atctgcacag cctgtgacga gtcctgcaag 750  
acgtgctcgg gcctgaccaa cagagactgc ggcgagtgtg aagtgggctg 800  
ggtgctggac gagggcgccct gtgtggatgt ggacgagtgt gcggccgagc 850  
cgcctccctg cagcgtgcg cagttctgta agaacgcaa cggctcctac 900  
acgtgcaag agtgtgactc cagctgtgtg ggctgcacag ggaaggccc 950  
aggaaactgt aaagagtgtg tctctggcta cgcgaggag cacggacagt 1000  
gtgcagatgt ggacgagtgc tcactagcag aaaaaacctg tgtgaggaaa 1050  
aacgaaaact gctacaatac tccagggagc tacgtctgtg tgtgtcctga 1100  
cggcttcgaa gaaacggaag atgcctgtgt gccgccggca gaggtgaag 1150  
ccacagaagg agaaagccc acacagctgc cctcccgcga agacctgtaa 1200  
tgtgccggac ttacccttta aattattcag aaggatgtcc cgtggaaaat 1250  
gtggccctga ggatgccgtc tcctgcagtg gacagcggcg gggagaggct 1300  
gcctgctctc taacggttga ttctcatttg tcccttaaac agctgcattt 1350  
cttggttgtt cttaaacaga cttgtatatt ttgatacagt tctttgtaat 1400  
aaaattgacc attgtaggta atcaggagga aaaaaaaaaa aaaaaaaaaa 1450  
aaagggcggc cgcgactcta gagtcgacct gcagaagctt ggccgccatg 1500  
gccaacttg tttattgcag cttataatgg ttacaaataa agcaatagca 1550  
tcacaaattt cacaaataaa gcattttttt cactgcattc tagttgtggt 1600  
ttgtccaaac tcatcaatgt atcttatcat gtctggatcg ggaattaatt 1650  
cggcgagca ccatggcctg aaataacctc tgaaagagga acttggttag 1700  
gtaccttctg aggcggaaag aaccagctgt ggaatgtgtg tcagttaggg 1750  
tgtggaaagt cccagggctc ccagcaggc agaagtatgc aagcatgcat 1800  
ctcaattagt cagcaacca gtttt 1825

<210> 2  
<211> 353  
<212> PRT  
<213> Homo Sapien

<400> 2  
Met Arg Leu Pro Arg Arg Ala Ala Leu Gly Leu Leu Pro Leu Leu  
1 5 10 15  
Leu Leu Leu Pro Pro Ala Pro Glu Ala Ala Lys Lys Pro Thr Pro  
Page 2

P1618P2C2 sequence listing.txt

20	25	30
Cys His Arg Cys Arg Gly Leu Val Asp Lys Phe Asn Gln Gly Met	35	45
Val Asp Thr Ala Lys Lys Asn Phe Gly Gly Gly Asn Thr Ala Trp	50	60
Glu Glu Lys Thr Leu Ser Lys Tyr Glu Ser Ser Glu Ile Arg Leu	65	75
Leu Glu Ile Leu Glu Gly Leu Cys Glu Ser Ser Asp Phe Glu Cys	80	90
Asn Gln Met Leu Glu Ala Gln Glu Glu His Leu Glu Ala Trp Trp	95	105
Leu Gln Leu Lys Ser Glu Tyr Pro Asp Leu Phe Glu Trp Phe Cys	110	120
Val Lys Thr Leu Lys Val Cys Cys Ser Pro Gly Thr Tyr Gly Pro	125	135
Asp Cys Leu Ala Cys Gln Gly Gly Ser Gln Arg Pro Cys Ser Gly	140	150
Asn Gly His Cys Ser Gly Asp Gly Ser Arg Gln Gly Asp Gly Ser	155	165
Cys Arg Cys His Met Gly Tyr Gln Gly Pro Leu Cys Thr Asp Cys	170	180
Met Asp Gly Tyr Phe Ser Ser Leu Arg Asn Glu Thr His Ser Ile	185	195
Cys Thr Ala Cys Asp Glu Ser Cys Lys Thr Cys Ser Gly Leu Thr	200	210
Asn Arg Asp Cys Gly Glu Cys Glu Val Gly Trp Val Leu Asp Glu	215	225
Gly Ala Cys Val Asp Val Asp Glu Cys Ala Ala Glu Pro Pro Pro	230	240
Cys Ser Ala Ala Gln Phe Cys Lys Asn Ala Asn Gly Ser Tyr Thr	245	255
Cys Glu Glu Cys Asp Ser Ser Cys Val Gly Cys Thr Gly Glu Gly	260	270
Pro Gly Asn Cys Lys Glu Cys Ile Ser Gly Tyr Ala Arg Glu His	275	285
Gly Gln Cys Ala Asp Val Asp Glu Cys Ser Leu Ala Glu Lys Thr	290	300
Cys Val Arg Lys Asn Glu Asn Cys Tyr Asn Thr Pro Gly Ser Tyr	305	315
Val Cys Val Cys Pro Asp Gly Phe Glu Glu Thr Glu Asp Ala Cys	320	330
Val Pro Pro Ala Glu Ala Glu Ala Thr Glu Gly Glu Ser Pro Thr		

Gln Leu Pro Ser Arg Glu Asp Leu  
350

<210> 3  
<211> 2206  
<212> DNA  
<213> Homo Sapien

<400> 3  
cagggtccaac tgcacctcgg ttctatcgat tgaattcccc ggggatcctc 50  
tagagatccc tcgacctcga cccacgcgtc cgccaggccg ggaggcgacg 100  
cgcccagccg tctaaacggg aacagccctg gctgagggag ctgcagcgca 150  
gcagagtatc tgacggcgcc aggttgcgta ggtgcggcac gaggagtttt 200  
cccggcagcg aggaggtcct gagcagcatg gcccgaggga gcgcctttccc 250  
tgccgcccgcg ctctggctct ggagcatcct cctgtgcctg ctggcactgc 300  
gggcggaggc cgggccgcgc caggaggaga gcctgtacct atggatcgat 350  
gctcaccagg caagagtact cataggattt gaagaagata tcctgattgt 400  
ttcagagggg aaaatggcac cttttacaca tgatttcaga aaagcgcaac 450  
agagaatgcc agctattcct gtcaatatcc attccatgaa ttttacctgg 500  
caagctgcag ggcaggcaga atacttctat gaattcctgt ccttgcgctc 550  
cctggataaa ggcattcatgg cagatccaac cgtcaatgtc cctctgctgg 600  
gaacagtgcc tcacaaggca tcagttgttc aagttggttt cccatgtctt 650  
ggaaaacagg atgggggtggc agcatttgaa gtggatgtga ttgttatgaa 700  
ttctgaaggc aacaccattc tccaaacacc tcaaaatgct atcttcttta 750  
aaacatgtca acaagctgag tgcccaggcg ggtgccgaaa tggaggcttt 800  
tgtaatgaaa gacgcatctg cgagtgtcct gatgggttcc acggacctca 850  
ctgtgagaaa gccctttgta cccacgatg tatgaatggg ggactttgtg 900  
tgactcctgg tttctgcate tgeccacctg gattctatgg agtgaactgt 950  
gacaaaagcaa actgctcaac cacctgcttt aatggaggga cctgtttcta 1000  
ccctggaaaa tgtatttgcc ctccaggact agagggagag cagtgtgaaa 1050  
tcagcaaatg cccacaaccc tgtcgaaatg gaggtaaatg cattggtaaa 1100  
agcaaatgta agtgttccaa aggttaccag ggagacctct gttcaaagcc 1150  
tgtctgcgag cctggctgtg gtgcacatgg aacctgccat gaaccaaca 1200  
aatgccaatg tcaagaaggt tggcatggaa gacactgcaa taaaaggtag 1250  
gaagccagcc tcatacatgc cctgaggcca gcaggcgccc agctcaggca 1300

P1618P2C2 sequence listing.txt

gcacacgcct tcacttaaaa aggccgagga gcggcgaggat ccacctgaat 1350  
ccaattacat ctggtgaact ccgacatctg aaacgtttta agttacacca 1400  
agttcatagc ctttgttaac ctttcatgtg ttgaatgttc aaataatgtt 1450  
cattacactt aagaatactg gcctgaatctt tattagcttc attataaatc 1500  
actgagctga tatttactct tccttttaag ttttctaagt acgtctgtag 1550  
catgatggta tagattttct tgtttcagtg ctttgggaca gattttatat 1600  
tatgtcaatt gatcagggtta aaattttcag tgtgtagttg gcagatattt 1650  
tcaaaattac aatgcattta tgggtgtctgg gggcagggga acatcagaaa 1700  
ggttaaattg ggcaaaaatg cgtaagtcac aagaatttgg atggtgcagt 1750  
taatgttgaa gttacagcat ttcagatttt attgtcagat atttagatgt 1800  
ttgttacatt tttaaaaatt gctcttaatt tttaaactct caatacaata 1850  
tattttgacc ttaccattat tccagagatt cagtattaaa aaaaaaaaaa 1900  
ttacactgtg gtagtggcat ttaacaata taatatattc taaacacaat 1950  
gaaatagggg atataatgta tgaacttttt gcattggctt gaagcaatat 2000  
aatatattgt aaacaaaaca cagctcttac ctaataaaca ttttatactg 2050  
tttgtatgta taaaataaag gtgctgcttt agtttttttg aaaaaaaaaa 2100  
aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa gggcgggccgc gactctagag 2150  
tcgacctgca gaagcttggc cgccatggcc caacttgttt attgcagctt 2200  
ataatg 2206

<210> 4

<211> 379

<212> PRT

<213> Homo Sapien

<400> 4

Met	Ala	Arg	Arg	Ser	Ala	Phe	Pro	Ala	Ala	Ala	Leu	Trp	Leu	Trp
1				5					10					15
Ser	Ile	Leu	Leu	Cys	Leu	Leu	Ala	Leu	Arg	Ala	Glu	Ala	Gly	Pro
				20					25					30
Pro	Gln	Glu	Glu	Ser	Leu	Tyr	Leu	Trp	Ile	Asp	Ala	His	Gln	Ala
				35					40					45
Arg	Val	Leu	Ile	Gly	Phe	Glu	Glu	Asp	Ile	Leu	Ile	Val	Ser	Glu
				50					55					60
Gly	Lys	Met	Ala	Pro	Phe	Thr	His	Asp	Phe	Arg	Lys	Ala	Gln	Gln
				65					70					75
Arg	Met	Pro	Ala	Ile	Pro	Val	Asn	Ile	His	Ser	Met	Asn	Phe	Thr
				80					85					90
Trp	Gln	Ala	Ala	Gly	Gln	Ala	Glu	Tyr	Phe	Tyr	Glu	Phe	Leu	Ser

P1618P2C2 sequence listing.txt

95 100 105

Leu Arg Ser Leu	Asp 110	Lys Gly Ile Met	Ala 115	Asp Pro Thr Val	Asn 120
Val Pro Leu Leu	Gly 125	Thr Val Pro His	Lys 130	Ala Ser Val Val	Gln 135
Val Gly Phe Pro	Cys 140	Leu Gly Lys Gln	Asp 145	Gly Val Ala Ala	Phe 150
Glu Val Asp Val	Ile 155	Val Met Asn Ser	Glu 160	Gly Asn Thr Ile	Leu 165
Gln Thr Pro Gln	Asn 170	Ala Ile Phe Phe	Lys 175	Thr Cys Gln Gln	Ala 180
Glu Cys Pro Gly	Gly 185	Cys Arg Asn Gly	Gly 190	Phe Cys Asn Glu	Arg 195
Arg Ile Cys Glu	Cys 200	Pro Asp Gly Phe	His 205	Gly Pro His Cys	Glu 210
Lys Ala Leu Cys	Thr 215	Pro Arg Cys Met	Asn 220	Gly Gly Leu Cys	Val 225
Thr Pro Gly Phe	Cys 230	Ile Cys Pro Pro	Gly 235	Phe Tyr Gly Val	Asn 240
Cys Asp Lys Ala	Asn 245	Cys Ser Thr Thr	Cys 250	Phe Asn Gly Gly	Thr 255
Cys Phe Tyr Pro	Gly 260	Lys Cys Ile Cys	Pro 265	Pro Gly Leu Glu	Gly 270
Glu Gln Cys Glu	Ile 275	Ser Lys Cys Pro	Gln 280	Pro Cys Arg Asn	Gly 285
Gly Lys Cys Ile	Gly 290	Lys Ser Lys Cys	Lys 295	Cys Ser Lys Gly	Tyr 300
Gln Gly Asp Leu	Cys 305	Ser Lys Pro Val	Cys 310	Glu Pro Gly Cys	Gly 315
Ala His Gly Thr	Cys 320	His Glu Pro Asn	Lys 325	Cys Gln Cys Gln	Glu 330
Gly Trp His Gly	Arg 335	His Cys Asn Lys	Arg 340	Tyr Glu Ala Ser	Leu 345
Ile His Ala Leu	Arg 350	Pro Ala Gly Ala	Gln 355	Leu Arg Gln His	Thr 360
Pro Ser Leu Lys	Lys 365	Ala Glu Glu Arg	Arg 370	Asp Pro Pro Glu	Ser 375

Asn Tyr Ile Trp

<210> 5  
 <211> 45  
 <212> DNA  
 <213> Artificial Sequence

P1618P2C2 sequence listing.txt

<220>  
<223> Synthetic Oligonucleotide Probe

<400> 5  
agggagcacg gacagtgtgc agatgtggac gagtgctcac tagca 45

<210> 6  
<211> 21  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Synthetic Oligonucleotide Probe

<400> 6  
agagtgtatc tctggctacg c 21

<210> 7  
<211> 22  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Synthetic Oligonucleotide Probe

<400> 7  
taagtccggc acattacagg tc 22

<210> 8  
<211> 49  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Synthetic Oligonucleotide Probe

<400> 8  
cccacgatgt atgaatggtg gacttttgtg gactcctggt ttctgcatc 49

<210> 9  
<211> 22  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Synthetic Oligonucleotide Probe

<400> 9  
aaagacgcat ctgcgagtgt cc 22

<210> 10  
<211> 23  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Synthetic Oligonucleotide Probe

<400> 10  
tgctgatttc aactgctct ccc 23

<210> 11

P1618P2C2 sequence listing.txt

<211> 2197  
<212> DNA  
<213> Homo Sapien

<400> 11

```

cggacgcgtg ggcgtccggc ggtcgcagag ccaggaggcg gaggcgcgcg 50
ggccagcctg ggccccagcc cacaccttca ccagggccca ggagccacca 100
tgtggcgatg tccactgggg ctactgctgt tgctgccgct ggctggccac 150
ttggctctgg gtgcccagca gggtcgtggg cgccgggagc tagcaccggg 200
tctgcacctg cggggcatcc gggacgcggg aggccggtac tgccaggagc 250
aggacctgtg ctgccgcggc cgtgccgacg actgtgccct gccctacctg 300
ggcgccatct gttactgtga cctcttctgc aaccgcacgg tctccgactg 350
ctgccctgac ttctgggact tctgcctcgg cgtgccaccc ctttttcccc 400
cgatccaagg atgtatgcat ggaggtcgta tctatccagt cttgggaacg 450
tactgggaca actgtaaccg ttgcacctgc caggagaaca ggcagtggca 500
tggtggatcc agacatgac aaagccatca accagggcaa ctatggctgg 550
caggctggga accacagcgc cttctggggc atgaccctgg atgagggcat 600
tcgctaccgc ctgggcacca tccgcccata ttctcggtc atgaacatgc 650
atgaaattta tacagtgtg aacccagggg aggtgcttcc cacagccttc 700
gaggcctctg agaagtggcc caacctgatt catgagcctc ttgaccaagg 750
caactgtgca ggctcctggg ctttctccac agcagctgtg gcatccgac 800
gtgtctcaat ccattctctg ggacacatga cgcctgtcct gtcgccccag 850
aacctgctgt cttgtgacac ccaccagcag cagggtgccc gcggtggggc 900
tctcgatggt gcctgggtgg tcttgcgtcg ccgaggggtg gtgtctgacc 950
actgctaccc cttctcgggc cgtgaacgag acgaggctgg ccctgcgccc 1000
ccctgtatga tgcacagccg agccatgggt cggggcaagc gccaggccac 1050
tgcccactgc cccaacagct atgttaataa caatgacatc taccaggtca 1100
ctcctgtcta ccgcctcggc tccaacgaca aggagatcat gaaggagctg 1150
atggagaatg gccctgtcca agccctcatg gaggtgcatg aggacttctt 1200
cctatacaag ggaggcatct acagccacac gccagtgagc cttgggaggc 1250
cagagagata ccgccggcat gggaccact cagtcaagat cacaggatgg 1300
ggagaggaga cgctgccaga tggaaggacg ctcaaatact ggactgcggc 1350
caactcctgg ggcccagcct ggggcgagag gggccacttc cgcacgtgc 1400
gcggcgtcaa tgagtgcgac atcgagagct tcgtgctggg cgtctggggc 1450

```



P1618P2C2 sequence listing.txt

cgcggtgggca tggaggacat gggatcatcac tgaggctgcg ggcaccacgc 1500  
 ggggtccggc ctgggatcca ggctaagggc cggcggaaga ggccccaatg 1550  
 gggcggtgac cccagcctcg cccgacagag cccggggcgc aggcgggagc 1600  
 cagggcgcta atccccggcg gggttccgct gacgcagcgc cccgcctggg 1650  
 agccgcgggc aggcgagact ggcggagccc ccagacctcc cagtggggac 1700  
 ggggcagggc ctggcctggg aagagcacag ctgcagatcc caggcctctg 1750  
 gcgccccac tcaagactac caaagccagg acacctcaag tctccagccc 1800  
 caatacccca cccaatccc gtattctttt ttttttttt ttagacaggg 1850  
 tcttgctccg ttgcccaggt tggagtgcag tggcccatca gggctcactg 1900  
 taacctccga ctctggggt caagtgaecc tccacctca gcctctcaag 1950  
 tagctgggac tacagggtgca ccaccacacc tggctaattt ttgtattttt 2000  
 tgtaaagagg ggggtctcac tgtgttgccc aggctggttt cgaactcctg 2050  
 ggctcaagcg gtccacctgc ctccgcctcc caaagtgctg ggattgcagg 2100  
 catgagccac tgcaccagc cctgtattct tattcttcag atattttattt 2150  
 ttcttttcac tgttttaaaa taaaaccaa gtattgataa aaaaaaa 2197

<210> 12

<211> 164

<212> PRT

<213> Homo Sapien

<400> 12

Met	Trp	Arg	Cys	Pro	Leu	Gly	Leu	Leu	Leu	Leu	Pro	Leu	Ala
1				5					10				15
Gly	His	Leu	Ala	Leu	Gly	Ala	Gln	Gln	Gly	Arg	Gly	Arg	Glu
			20						25				30
Leu	Ala	Pro	Gly	Leu	His	Leu	Arg	Gly	Ile	Arg	Asp	Ala	Gly
			35						40				45
Arg	Tyr	Cys	Gln	Glu	Gln	Asp	Leu	Cys	Cys	Arg	Gly	Arg	Ala
			50						55				60
Asp	Cys	Ala	Leu	Pro	Tyr	Leu	Gly	Ala	Ile	Cys	Tyr	Cys	Leu
			65						70				75
Phe	Cys	Asn	Arg	Thr	Val	Ser	Asp	Cys	Cys	Pro	Asp	Phe	Trp
			80						85				90
Phe	Cys	Leu	Gly	Val	Pro	Pro	Pro	Phe	Pro	Pro	Ile	Gln	Gly
			95						100				105
Met	His	Gly	Gly	Arg	Ile	Tyr	Pro	Val	Leu	Gly	Thr	Tyr	Trp
			110						115				120
Asn	Cys	Asn	Arg	Cys	Thr	Cys	Gln	Glu	Asn	Arg	Gln	Trp	His
			125						130				135

P1618P2C2 sequence listing.txt

Gly Ser Arg His Asp Gln Ser His Gln Pro Gly Gln Leu Trp Leu  
140 145 150

Ala Gly Trp Glu Pro Gln Arg Leu Leu Gly His Asp Pro Gly  
155 160

<210> 13  
<211> 533  
<212> DNA  
<213> Homo Sapien

<220>  
<221> unsure  
<222> 33, 37, 80, 94, 144, 188  
<223> unknown base

<400> 13  
aggctccttg gccctttttc cacagcaagc ttntgcnatc ccgattcggt 50  
gtctcaaadc caattctctt gggacacatn acgcctgtcc tttngcccca 100  
gaacctgctg tcttgtagac ccaccagcag cagggctgcc gcgntgggag 150  
tctcgatggt gcctgggtgt tctgctgctg ccgagggntg gtgtctgacc 200  
actgctaccc cttctcgggc cgtgaacgag acgaggtctg ccctgcgccc 250  
ccctgtatga tgcacagccg agccatgggt cggggcaagc gccaggccac 300  
tgcccactgc cccaacagct atgttaataa caatgacatc taccaggtca 350  
ctctgtcta ccgcctcggc tccaacgaca aggagatcat gaaggagctg 400  
atggagaatg gccctgtcca agccctcatg gaggtgcatg aggacttctt 450  
cctatacaag ggaggcatct acagccacac gccagtgagc cttgggagga 500  
cagagagata ccgccggcat gggacccact cag 533

<210> 14  
<211> 24  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Synthetic Oligonucleotide Probe

<400> 14  
ttcgaggcct ctgagaagtg gccc 24

<210> 15  
<211> 22  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Synthetic Oligonucleotide Probe

<400> 15  
ggcggatatc ctctggcctc cc 22

<210> 16  
<211> 50

P1618P2C2 sequence listing.txt

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic Oligonucleotide Probe

<400> 16

ttctccacag cagctgtggc atccgatcgt gtctcaatcc attctctggg 50

<210> 17

<211> 960

<212> DNA

<213> Homo Sapien

<400> 17

gctgcttgcc ctgttgatgg caggcttggc cctgcagcca ggactgccc 50  
 tgctgtgcta ctctgcaaa gcccagggtga gcaacgagga ctgcctgcag 100  
 gtggagaact gcacccagct gggggagcag tgctggaccg cgcgcattccg 150  
 cgcagttggc ctctgaccg tcattcagcaa aggctgcagc ttgaactgcg 200  
 tggatgactc acaggactac tacgtgggca agaagaacat cacgtgctgt 250  
 gacaccgact tgtgcaacgc cagcggggcc catgccctgc agccggctgc 300  
 cgccatcctt gcgctgctcc ctgcactcgg cctgctgctc tggggacccg 350  
 gccagctata ggctctgggg ggccccgctg cagcccacac tgggtgtggt 400  
 gccccaggcc tctgtgccac tcctcacaga cctggcccag tgggagcctg 450  
 tcctggttcc tgaggcacat cctaacgcaa gtctgaccat gtatgtctgc 500  
 acccctgtcc cccaccctga ccctcccatg gccctctcca ggactccac 550  
 ccggcagatc agctctagt acacagatcc gcctgcagat ggccccctcca 600  
 accctctctg ctgctgtttc catggcccag cattctccac ccttaaccct 650  
 gtgctcaggc acctcttccc ccaggaagcc ttccctgccc acccatcta 700  
 tgacttgagc caggctctggc ccgtggtgtc cccgcaccc agcaggggac 750  
 aggcactcag gagggcccag taaaggctga gatgaagtgg actgagtaga 800  
 actggaggac aagagtcgac gtgagttcct gggagtctcc agagatgggg 850  
 cctggaggcc tggaggaagg ggccaggcct cacattcgtg gggctccctg 900  
 aatggcagcc tgagcacagc gtagggcctt aataaacacc tgttgataa 950  
 gccaaaaaaaa 960

<210> 18

<211> 189

<212> PRT

<213> Homo Sapien

<400> 18

Met Thr His Arg Thr Thr Thr Trp Ala Arg Arg Thr Ser Arg Ala  
 1 5 10 15

P1618P2C2 sequence listing.txt

Val Thr Pro Thr Cys Ala Thr Pro Ala Gly Pro Met Pro Cys Ser  
20 25 30  
Arg Leu Pro Pro Ser Leu Arg Cys Ser Leu His Ser Ala Cys Cys  
35 40 45  
Ser Gly Asp Pro Ala Ser Tyr Arg Leu Trp Gly Ala Pro Leu Gln  
50 55 60  
Pro Thr Leu Gly Val Val Pro Gln Ala Ser Val Pro Leu Leu Thr  
65 70 75  
Asp Leu Ala Gln Trp Glu Pro Val Leu Val Pro Glu Ala His Pro  
80 85 90  
Asn Ala Ser Leu Thr Met Tyr Val Cys Thr Pro Val Pro His Pro  
95 100 105  
Asp Pro Pro Met Ala Leu Ser Arg Thr Pro Thr Arg Gln Ile Ser  
110 115 120  
Ser Ser Asp Thr Asp Pro Pro Ala Asp Gly Pro Ser Asn Pro Leu  
125 130 135  
Cys Cys Cys Phe His Gly Pro Ala Phe Ser Thr Leu Asn Pro Val  
140 145 150  
Leu Arg His Leu Phe Pro Gln Glu Ala Phe Pro Ala His Pro Ile  
155 160 165  
Tyr Asp Leu Ser Gln Val Trp Ser Val Val Ser Pro Ala Pro Ser  
170 175 180  
Arg Gly Gln Ala Leu Arg Arg Ala Gln  
185

<210> 19

<211> 24

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic Oligonucleotide Probe

<400> 19

tgctgtgcta ctcttgcaaa gccc 24

<210> 20

<211> 24

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic Oligonucleotide Probe

<400> 20

tgcaacaagtc ggtgtcacag cacg 24

<210> 21

<211> 44

<212> DNA

<213> Artificial Sequence

P1618P2C2 sequence listing.txt

<220>

<223> Synthetic Oligonucleotide Probe

<400> 21

agcaacgagg actgcctgca ggtggagaac tgcacccagc tggg 44

<210> 22

<211> 1200

<212> DNA

<213> Homo Sapien

<400> 22

cccacgcgtc cgaacctctc cagcgatggg agccgcccgc ctgctgcca 50  
acctcactct gtgcttacag ctgctgattc tctgctgtca aactcagtac 100  
gtgagggacc agggcgccat gaccgaccag ctgagcaggc ggcagatccg 150  
cgagtaccaa ctctacagca ggaccagtgg caagcacgtg caggtcaccg 200  
ggcgtcgcac ctccgccacc gccgaggacg gcaacaagtt tgccaagctc 250  
atagtggaga cggacacgtt tggcagccgg gttcgcatca aaggggctga 300  
gagtgagaag tacatctgta tgaacaagag gggcaagctc atcggaagc 350  
ccagcgggaa gagcaaagac tgcgtgttca cggagatcgt gctggagaac 400  
aactatacgg ccttccagaa cgcccgccac gagggctggg tcatggcctt 450  
cacgcggcag gggcgccccc gccaggcttc ccgcagccgc cagaaccagc 500  
gcgaggccca cttcatcaag cgctctacc aaggccagct gcccttcccc 550  
aaccacgccg agaagcagaa gcagttcgag tttgtgggct ccgccccac 600  
ccgcccggacc aagcgcacac ggcggcccca gccctcacg tagtctggga 650  
ggcagggggc agcagcccc tggccgcctc cccaccctt tcccttctta 700  
atccaaggac tgggctgggg tggcgggagg ggagccagat ccccgaggga 750  
ggaccctgag ggccgcgaag catccgagcc cccagctggg aaggggcagg 800  
ccggtgcccc aggggcggct ggcacagtgc ccccttccc gacgggtggc 850  
aggccctgga gaggaactga gtgtcaceet gatctcaggc caccagcctc 900  
tgccggcctc ccagccgggc tcctgaagcc cgctgaaagg tcagcgactg 950  
aaggccttgc agacaaccgt ctggaggtgg ctgtcctcaa aatctgcttc 1000  
tcggatctcc ctacgtctgc cccagcccc caaactcctc ctggctagac 1050  
tgtaggaagg gacttttgtt tgtttgtttg tttcaggaaa aaagaaaggg 1100  
agagagagga aaatagaggg ttgtccactc ctacattcc acgaccagg 1150  
cctgcacccc accccaact cccagcccc gaataaaacc attttctgc 1200

<210> 23

<211> 205

P1618P2C2 sequence listing.txt

<212> PRT

<213> Homo Sapien

<400> 23

```

Met Gly Ala Ala Arg Leu Leu Pro Asn Leu Thr Leu Cys Leu Gln
 1      5      10      15
Leu Leu Ile Leu Cys Cys Gln Thr Gln Tyr Val Arg Asp Gln Gly
      20      25      30
Ala Met Thr Asp Gln Leu Ser Arg Arg Gln Ile Arg Glu Tyr Gln
      35      40      45
Leu Tyr Ser Arg Thr Ser Gly Lys His Val Gln Val Thr Gly Arg
      50      55      60
Arg Ile Ser Ala Thr Ala Glu Asp Gly Asn Lys Phe Ala Lys Leu
      65      70      75
Ile Val Glu Thr Asp Thr Phe Gly Ser Arg Val Arg Ile Lys Gly
      80      85      90
Ala Glu Ser Glu Lys Tyr Ile Cys Met Asn Lys Arg Gly Lys Leu
      95     100     105
Ile Gly Lys Pro Ser Gly Lys Ser Lys Asp Cys Val Phe Thr Glu
     110     115     120
Ile Val Leu Glu Asn Asn Tyr Thr Ala Phe Gln Asn Ala Arg His
     125     130     135
Glu Gly Trp Phe Met Ala Phe Thr Arg Gln Gly Arg Pro Arg Gln
     140     145     150
Ala Ser Arg Ser Arg Gln Asn Gln Arg Glu Ala His Phe Ile Lys
     155     160     165
Arg Leu Tyr Gln Gly Gln Leu Pro Phe Pro Asn His Ala Glu Lys
     170     175     180
Gln Lys Gln Phe Glu Phe Val Gly Ser Ala Pro Thr Arg Arg Thr
     185     190     195
Lys Arg Thr Arg Arg Pro Gln Pro Leu Thr
     200     205

```

<210> 24

<211> 28

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic Oligonucleotide Probe

<400> 24

cagtacgtga gggaccaggg cgccatga 28

<210> 25

<211> 24

<212> DNA

<213> Artificial Sequence

<220>

P1618P2C2 sequence listing.txt

<223> Synthetic Oligonucleotide Probe

<400> 25

ccggtgacct gcacgtgctt gccca 24

<210> 26

<211> 41

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic Oligonucleotide Probe

<220>

<221> unsure

<222> 21

<223> unknown base

<400> 26

gcggatctgc cgcctgctca nctggctcgg catggcgccc t 41

<210> 27

<211> 2479

<212> DNA

<213> Homo Sapien

<400> 27

acttgccatc acctgttgcc agtgtggaaa aattctccct gttgaatttt 50

ttgcacatgg aggacagcag caaagagggc aacacaggct gataagacca 100

gagacagcag ggagattatt ttaccatacg ccctcaggac gttccctcta 150

gctggagttc tggacttcaa cagaacccca tccagtcatt ttgattttgc 200

tgtttatttt ttttttcttt ttctttttcc caccacattg tattttattt 250

ccgtacttca gaaatgggcc tacagaccac aaagtggccc agccatgggg 300

cttttttctt gaagtcttgg cttatcattt ccctggggct ctactcacag 350

gtgtccaaac tcctggcctg ccctagtgtg tgccgctgcg acaggaactt 400

tgtctactgt aatgagcgaa gcttgacctc agtgcctctt gggatcccgg 450

agggcgtaac cgtactctac ctccacaaca accaaattaa taatgctgga 500

tttctctcag aactgcacaa tgtacagtcg gtgcacacgg tctacctgta 550

tggcaaccaa ctggacgaat tccccatgaa ctttcccaag aatgtcagag 600

ttctccattt gcaggaaaac aatattcaga ccatttcacg ggctgctctt 650

gcccagctct tgaagcttga agagctgcac ctggatgaca actccatata 700

cacagtgggg gtggaagacg gggccttccg ggaggctatt agcctcaaata 750

tgttggtttt gtctaagaat cacctgagca gtgtgcctgt tgggcttcct 800

gtggacttgc aagagctgag agtggatgaa aatcgaattg ctgtcatata 850

cgacatggcc ttccagaatc tcacgagctt ggagcgtctt attgtggacg 900

P1618P2C2 sequence listing.txt

ggaacctcct gaccaacaag ggtatcgccg agggcacctt cagccatctc 950  
 accaagctca aggaattttc aattgtacgt aattcgctgt cccaccctcc 1000  
 tcccgatctc ccaggtacgc atctgatcag gctctatttg caggacaacc 1050  
 agataaacca cattcctttg acagccttct caaatctgcg taagctggaa 1100  
 cggctggata tatccaacaa ccaactgcgg atgctgactc aaggggtttt 1150  
 tgataatctc tccaacctga agcagctcac tgctcggaat aacccttggt 1200  
 tttgtgactg cagtattaaa tgggtcacag aatggctcaa atatatccct 1250  
 tcatctctca acgtgcgggg tttcatgtgc caaggctctg aacaagtccg 1300  
 ggggatggcc gtcagggaaat taaatatgaa tcttttgctc tgtcccacca 1350  
 cgacccccgg cctgcctctc ttcaccccag cccaagtac agcttctccg 1400  
 accactcagc ctcccaccct ctctattcca aaccctagca gaagctacac 1450  
 gcctccaact cctaccacat cgaaacttcc cacgattcct gactgggatg 1500  
 gcagagaaaag agtgacccca cctatttctg aacggatcca gctctctatc 1550  
 cattttgtga atgatacttc cattcaagtc agctggctct ctctcttcac 1600  
 cgtgatggca tacaaactca catgggtgaa aatgggccac agtttagtag 1650  
 ggggcatcgt tcaggagcgc atagtcagcg gtgagaagca acacctgagc 1700  
 ctggttaact tagagccccg atccacctat cggatttggt tagtgccact 1750  
 ggatgctttt aactaccgcg cggtagaaga caccatttgt tcagaggcca 1800  
 ccacccatgc ctctatctg aacaacggca gcaacacagc gtccagccat 1850  
 gagcagacga cgtccacag catgggctcc ccttttctgc tggcgggctt 1900  
 gatcgggggc gcggtgatat ttgtgctggt ggtcttgctc agcgtctttt 1950  
 gctggcatat gcacaaaaag gggcgctaca cctcccagaa gtggaaatac 2000  
 aaccggggcc ggcggaaaga tgattattgc gaggcaggca ccaagaagga 2050  
 caactccatc ctggagatga cagaaaccag ttttcagatc gtctccttaa 2100  
 ataacgatca actccttaaa ggagatttca gactgcagcc catttacacc 2150  
 ccaaattggg gcattaatta cacagactgc catatcccca acaacatgcg 2200  
 atactgcaac agcagcgtgc cagacctgga gactgccat acgtgacagc 2250  
 cagaggccca gcgttatcaa ggcggacaat tagactcttg agaacacact 2300  
 cgtgtgtgca cataaagaca cgcagattac atttgataaa tgttacacag 2350  
 atgcatttgt gcatttgaat actctgtaat ttatacgggt tactatataa 2400  
 tgggatttaa aaaaagtgt atcttttcta tttcaagtta attacaaaca 2450  
 gttttgtaac tctttgcttt ttaaactctt 2479



P1618P2C2 sequence listing.txt

<210> 28  
 <211> 660  
 <212> PRT  
 <213> Homo Sapien

<400> 28  
 Met Gly Leu Gln Thr Thr Lys Trp Pro Ser His Gly Ala Phe Phe  
 1 5 10 15  
 Leu Lys Ser Trp Leu Ile Ile Ser Leu Gly Leu Tyr Ser Gln Val  
 20 25 30  
 Ser Lys Leu Leu Ala Cys Pro Ser Val Cys Arg Cys Asp Arg Asn  
 35 40 45  
 Phe Val Tyr Cys Asn Glu Arg Ser Leu Thr Ser Val Pro Leu Gly  
 50 55 60  
 Ile Pro Glu Gly Val Thr Val Leu Tyr Leu His Asn Asn Gln Ile  
 65 70 75  
 Asn Asn Ala Gly Phe Pro Ala Glu Leu His Asn Val Gln Ser Val  
 80 85 90  
 His Thr Val Tyr Leu Tyr Gly Asn Gln Leu Asp Glu Phe Pro Met  
 95 100 105  
 Asn Leu Pro Lys Asn Val Arg Val Leu His Leu Gln Glu Asn Asn  
 110 115 120  
 Ile Gln Thr Ile Ser Arg Ala Ala Leu Ala Gln Leu Leu Lys Leu  
 125 130 135  
 Glu Glu Leu His Leu Asp Asp Asn Ser Ile Ser Thr Val Gly Val  
 140 145 150  
 Glu Asp Gly Ala Phe Arg Glu Ala Ile Ser Leu Lys Leu Leu Phe  
 155 160 165  
 Leu Ser Lys Asn His Leu Ser Ser Val Pro Val Gly Leu Pro Val  
 170 175 180  
 Asp Leu Gln Glu Leu Arg Val Asp Glu Asn Arg Ile Ala Val Ile  
 185 190 195  
 Ser Asp Met Ala Phe Gln Asn Leu Thr Ser Leu Glu Arg Leu Ile  
 200 205 210  
 Val Asp Gly Asn Leu Leu Thr Asn Lys Gly Ile Ala Glu Gly Thr  
 215 220 225  
 Phe Ser His Leu Thr Lys Leu Lys Glu Phe Ser Ile Val Arg Asn  
 230 235 240  
 Ser Leu Ser His Pro Pro Pro Asp Leu Pro Gly Thr His Leu Ile  
 245 250 255  
 Arg Leu Tyr Leu Gln Asp Asn Gln Ile Asn His Ile Pro Leu Thr  
 260 265 270  
 Ala Phe Ser Asn Leu Arg Lys Leu Glu Arg Leu Asp Ile Ser Asn  
 275 280 285

P1618P2C2 sequence listing.txt

Asn Gln Leu Arg	Met	Leu Thr Gln Gly	Val	Phe Asp Asn Leu	Ser
	290		295		300
Asn Leu Lys Gln	Leu Thr Ala Arg Asn	Asn	Pro Trp Phe Cys	Asp	
	305		310		315
Cys Ser Ile Lys	Trp Val Thr Glu Trp	Leu	Lys Tyr Ile Pro	Ser	
	320		325		330
Ser Leu Asn Val	Arg Gly Phe Met Cys	Gln Gly Pro Glu Gln	Val		
	335		340		345
Arg Gly Met Ala	Val Arg Glu Leu Asn	Met	Asn Leu Leu Ser	Cys	
	350		355		360
Pro Thr Thr Thr	Pro Gly Leu Pro Leu	Phe Thr Pro Ala Pro	Ser		
	365		370		375
Thr Ala Ser Pro	Thr Thr Gln Pro Pro	Thr Leu Ser Ile Pro	Asn		
	380		385		390
Pro Ser Arg Ser	Tyr Thr Pro Pro Thr	Pro Thr Thr Ser Lys	Leu		
	395		400		405
Pro Thr Ile Pro	Asp Trp Asp Gly Arg	Glu Arg Val Thr Pro	Pro		
	410		415		420
Ile Ser Glu Arg	Ile Gln Leu Ser Ile	His Phe Val Asn Asp	Thr		
	425		430		435
Ser Ile Gln Val	Ser Trp Leu Ser Leu	Phe Thr Val Met Ala	Tyr		
	440		445		450
Lys Leu Thr Trp	Val Lys Met Gly His	Ser Leu Val Gly Gly	Ile		
	455		460		465
Val Gln Glu Arg	Ile Val Ser Gly Glu	Lys Gln His Leu Ser	Leu		
	470		475		480
Val Asn Leu Glu	Pro Arg Ser Thr Tyr	Arg Ile Cys Leu Val	Pro		
	485		490		495
Leu Asp Ala Phe	Asn Tyr Arg Ala Val	Glu Asp Thr Ile Cys	Ser		
	500		505		510
Glu Ala Thr Thr	His Ala Ser Tyr Leu	Asn Asn Gly Ser Asn	Thr		
	515		520		525
Ala Ser Ser His	Glu Gln Thr Thr Ser	His Ser Met Gly Ser	Pro		
	530		535		540
Phe Leu Leu Ala	Gly Leu Ile Gly Gly	Ala Val Ile Phe Val	Leu		
	545		550		555
Val Val Leu Leu	Ser Val Phe Cys Trp	His Met His Lys Lys	Gly		
	560		565		570
Arg Tyr Thr Ser	Gln Lys Trp Lys Tyr	Asn Arg Gly Arg Arg	Lys		
	575		580		585
Asp Asp Tyr Cys	Glu Ala Gly Thr Lys	Lys Asp Asn Ser Ile	Leu		
	590		595		600

P1618P2C2 sequence listing.txt

Glu Met Thr Glu Thr Ser Phe Gln Ile Val Ser Leu Asn Asn Asp	605	610	615
Gln Leu Leu Lys Gly Asp Phe Arg Leu Gln Pro Ile Tyr Thr Pro	620	625	630
Asn Gly Gly Ile Asn Tyr Thr Asp Cys His Ile Pro Asn Asn Met	635	640	645
Arg Tyr Cys Asn Ser Ser Val Pro Asp Leu Glu His Cys His Thr	650	655	660

<210> 29  
 <211> 21  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Synthetic Oligonucleotide Probe

<400> 29  
 cggctacct gtatggcaac c 21

<210> 30  
 <211> 22  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Synthetic Oligonucleotide Probe

<400> 30  
 gcaggacaac cagataaacc ac 22

<210> 31  
 <211> 22  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Synthetic Oligonucleotide Probe

<400> 31  
 acgcagattt gagaaggctg tc 22

<210> 32  
 <211> 46  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Synthetic Oligonucleotide Probe

<400> 32  
 ttcacgggct gctcttgccc agctcttgaa gcttgaagag ctgcac 46

<210> 33  
 <211> 3449  
 <212> DNA  
 <213> Homo Sapien

<400> 33

P1618P2C2 sequence listing.txt

```

acttggagca agcggcgggcg gcggagacag aggagaggc agaagctggg 50
gctccgtcct cgcctccac gagcgatccc cgaggagagc cgcgccctc 100
ggcgaggcga agaggccgac gaggaagacc cgggtggctg cggccctgcc 150
tcgcttccca ggcggcgggcg gctgcagcct tgcccctctt gctcgcttg 200
aaaatgaaa agatgctcgc aggctgcttt ctgctgatcc tcggacagat 250
cgtcctcctc cctgccgagg ccaggagcgc gtcacgtggg aggtccatct 300
ctaggggcag acacgctcgg acccaccgc agacggccct tctggagagt 350
tcctgtgaga acaagcgggc agacctggtt ttcattctg acagctctcg 400
cagtgtcaac acccatgact atgcaaaggc caaggagttc atcgtggaca 450
tcttgcaatt cttggacatt ggtcctgatg tcacccgagt gggcctgctc 500
caatatggca gactgtcaa gaatgagttc tccctcaaga cttcaagag 550
gaagtcgag gtggagcgtg ctgtcaagag gatgcggcat ctgtccacgg 600
gcaccatgac tgggctggcc atccagtatg ccctgaacat cgcattctca 650
gaagcagagg gggcccgcc cctgaggag aatgtgccac gggtcataat 700
gatcgtgaca gatgggagac ctgaggactc cgtggccgag gtggctgcta 750
aggcacggga cacgggcac ctaatctttg ccattggtgt gggccaggta 800
gacttcaaca cttgaagtc cattgggagt gagcccatg aggacctgt 850
cttccttggt gccaatctca gccagattga gacgtgacc tccgtgttcc 900
agaagaagtt gtgcacggcc cacatgtgca gcaccctgga gcataactgt 950
gcccacttct gcatcaacat ccctggctca tacgtctgca ggtgcaaaca 1000
aggctacatt ctcaactcgg atcagacgac ttgcagaatc caggatctgt 1050
gtgccatgga ggaccacaac tgtgagcagc tctgtgtgaa tgtgccgggc 1100
tccttcgtct gccagtgcta cagtggctac gccctggctg aggatgggaa 1150
gagggtgtgt gctgtggact actgtgcctc agaaaaccac ggatgtgaac 1200
atgagtgtgt aaatgctgat ggctcctacc tttgccagt ccatgaagga 1250
tttgctctta acccagatga aaaaacgtgc acaaggatca actactgtgc 1300
actgaacaaa ccgggctgtg agcatgagtg cgtcaacatg gaggagagct 1350
actactgccg ctgccaccgt ggctacactc tggacccaa tggcaaaacc 1400
tgcagccgag tggaccactg tgcacagcag gaccatggct gtgagcagct 1450
gtgtctgaac acggaggatt cttcgtctg ccagtgtca gaaggcttcc 1500
tcatcaacga ggacctcaag acctgctccc ggggtggatta ctgcctgctg 1550
agtgaccatg gttgtgaata ctctgtgtc aacatggaca gatcctttgc 1600

```

P1618P2C2 sequence listing.txt

ctgtcagtgt cctgagggac acgtgctccg cagcgatggg aagacgtgtg 1650  
 caaaattgga ctcttgtgct ctgggggacc acggttgtga acattcgtgt 1700  
 gtaagcagtg aagattcgtt tgtgtgccag tgctttgaag gttatatact 1750  
 ccgtgaagat ggaaaaacct gcagaaggaa agatgtctgc caagctatag 1800  
 accatggctg tgaacacatt tgtgtgaaca gtgacgactc atacacgtgc 1850  
 gagtgcttgg agggattccg gctcgtgag gatgggaaac gctgccgaag 1900  
 gaaggatgtc tgcaaatcaa cccaccatgg ctgcgaacac atttgtgtta 1950  
 ataatgggaa ttcctacatc tgcaaatgct cagagggatt tgttctagct 2000  
 gaggacggaa gacggtgcaa gaaatgcact gaaggcccaa ttgacctggt 2050  
 ctttgtgatc gatggatcca agagtcttgg agaagagaat tttgaggtcg 2100  
 tgaagcagtt tgtcactgga attatagatt ccttgacaat ttccccaaa 2150  
 gccgctcgag tggggctgct ccagtattcc acacagggtcc acacagagtt 2200  
 cactctgaga aacttcaact cagccaaaga catgaaaaaa gccgtggccc 2250  
 acatgaaata catgggaaag ggctctatga ctgggctggc cctgaaacac 2300  
 atgtttgaga gaagttttac ccaaggagaa ggggccaggc ccctttccac 2350  
 aagggtgccc agagcagcca ttgtgttcac cgacggacgg gctcaggatg 2400  
 acgtctccga gtggggcagt aaagccaagg ccaatggtat cactatgtat 2450  
 gctgttgggg taggaaaagc cattgaggag gaactacaag agattgcctc 2500  
 tgagcccaca aacaagcatc tcttctatgc cgaagacttc agcacaatgg 2550  
 atgagataag tgaaaaactc aagaaaggca tctgtgaagc tctagaagac 2600  
 tccgatggaa gacaggactc tccagcaggg gaactgcaa aaacggtcca 2650  
 acagccaaca gaatctgagc cagtcaccat aaatatcaa gacctacttt 2700  
 cctgttctaa ttttgcagtg caacacagat atctgtttga agaagacaat 2750  
 cttttacggt ctacacaaaa gctttcccat tcaacaaaac cttcaggaag 2800  
 ccctttggaa gaaaaacacg atcaatgcaa atgtgaaaac cttataatgt 2850  
 tccagaacct tgcaaacgaa gaagtaagaa aattaacaca gcgcttagaa 2900  
 gaaatgacac agagaatgga agccctggaa aatcgctga gatacagatg 2950  
 aagattagaa atcgcgacac atttgtagtc attgtatcac ggattacaat 3000  
 gaacgcagtg cagagcccca aagctcaggc tattgttaaa tcaataatgt 3050  
 tgtgaagtaa aacaatcagt actgagaaac ctggtttgcc acagaacaaa 3100  
 gacaagaagt atacactaac ttgtataaat ttatctagga aaaaaatcct 3150

P1618P2C2 sequence listing.txt

tcagaattct aagatgaatt taccagggtga gaatgaataa gctatgcaag 3200  
 gtatttttgta atatactgtg gacacaactt gcttctgcct catcctgcct 3250  
 tagtgtgcaa tctcatttga ctatacgata aagtttgcac agtcttactt 3300  
 ctgtagaaca ctggccatag gaaatgctgt tttttgtac tggactttac 3350  
 cttgatatat gtatatggat gtatgcataa aatcatagga catatgtact 3400  
 tgtggaacaa gttggatttt ttatacaata ttaaaattca ccacttcag 3449

<210> 34  
 <211> 915  
 <212> PRT  
 <213> Homo Sapien

<400> 34  
 Met Glu Lys Met Leu Ala Gly Cys Phe Leu Leu Ile Leu Gly Gln  
 1 5 10 15  
 Ile Val Leu Leu Pro Ala Glu Ala Arg Glu Arg Ser Arg Gly Arg  
 20 25 30  
 Ser Ile Ser Arg Gly Arg His Ala Arg Thr His Pro Gln Thr Ala  
 35 40 45  
 Leu Leu Glu Ser Ser Cys Glu Asn Lys Arg Ala Asp Leu Val Phe  
 50 55 60  
 Ile Ile Asp Ser Ser Arg Ser Val Asn Thr His Asp Tyr Ala Lys  
 65 70 75  
 Val Lys Glu Phe Ile Val Asp Ile Leu Gln Phe Leu Asp Ile Gly  
 80 85 90  
 Pro Asp Val Thr Arg Val Gly Leu Leu Gln Tyr Gly Ser Thr Val  
 95 100 105  
 Lys Asn Glu Phe Ser Leu Lys Thr Phe Lys Arg Lys Ser Glu Val  
 110 115 120  
 Glu Arg Ala Val Lys Arg Met Arg His Leu Ser Thr Gly Thr Met  
 125 130 135  
 Thr Gly Leu Ala Ile Gln Tyr Ala Leu Asn Ile Ala Phe Ser Glu  
 140 145 150  
 Ala Glu Gly Ala Arg Pro Leu Arg Glu Asn Val Pro Arg Val Ile  
 155 160 165  
 Met Ile Val Thr Asp Gly Arg Pro Gln Asp Ser Val Ala Glu Val  
 170 175 180  
 Ala Ala Lys Ala Arg Asp Thr Gly Ile Leu Ile Phe Ala Ile Gly  
 185 190 195  
 Val Gly Gln Val Asp Phe Asn Thr Leu Lys Ser Ile Gly Ser Glu  
 200 205 210  
 Pro His Glu Asp His Val Phe Leu Val Ala Asn Phe Ser Gln Ile  
 215 220 225

P1618P2C2 sequence listing.txt

Glu Thr Leu Thr	Ser Val Phe Gln Lys	Lys Leu Cys Thr Ala His
230		235 240
Met Cys Ser Thr	Leu Glu His Asn Cys	Ala His Phe Cys Ile Asn
245		250 255
Ile Pro Gly Ser	Tyr Val Cys Arg Cys	Lys Gln Gly Tyr Ile Leu
260		265 270
Asn Ser Asp Gln	Thr Thr Cys Arg Ile	Gln Asp Leu Cys Ala Met
275		280 285
Glu Asp His Asn	Cys Glu Gln Leu Cys	Val Asn Val Pro Gly Ser
290		295 300
Phe Val Cys Gln	Cys Tyr Ser Gly Tyr	Ala Leu Ala Glu Asp Gly
305		310 315
Lys Arg Cys Val	Ala Val Asp Tyr Cys	Ala Ser Glu Asn His Gly
320		325 330
Cys Glu His Glu	Cys Val Asn Ala Asp	Gly Ser Tyr Leu Cys Gln
335		340 345
Cys His Glu Gly	Phe Ala Leu Asn Pro	Asp Glu Lys Thr Cys Thr
350		355 360
Arg Ile Asn Tyr	Cys Ala Leu Asn Lys	Pro Gly Cys Glu His Glu
365		370 375
Cys Val Asn Met	Glu Glu Ser Tyr Tyr	Cys Arg Cys His Arg Gly
380		385 390
Tyr Thr Leu Asp	Pro Asn Gly Lys Thr	Cys Ser Arg Val Asp His
395		400 405
Cys Ala Gln Gln	Asp His Gly Cys Glu	Gln Leu Cys Leu Asn Thr
410		415 420
Glu Asp Ser Phe	Val Cys Gln Cys Ser	Glu Gly Phe Leu Ile Asn
425		430 435
Glu Asp Leu Lys	Thr Cys Ser Arg Val	Asp Tyr Cys Leu Leu Ser
440		445 450
Asp His Gly Cys	Glu Tyr Ser Cys Val	Asn Met Asp Arg Ser Phe
455		460 465
Ala Cys Gln Cys	Pro Glu Gly His Val	Leu Arg Ser Asp Gly Lys
470		475 480
Thr Cys Ala Lys	Leu Asp Ser Cys Ala	Leu Gly Asp His Gly Cys
485		490 495
Glu His Ser Cys	Val Ser Ser Glu Asp	Ser Phe Val Cys Gln Cys
500		505 510
Phe Glu Gly Tyr	Ile Leu Arg Glu Asp	Gly Lys Thr Cys Arg Arg
515		520 525
Lys Asp Val Cys	Gln Ala Ile Asp His	Gly Cys Glu His Ile Cys
530		535 540

P1618P2C2 sequence listing.txt

Val	Asn	Ser	Asp	Asp	Ser	Tyr	Thr	Cys	Glu	Cys	Leu	Glu	Gly	Phe
				545					550					555
Arg	Leu	Ala	Glu	Asp	Gly	Lys	Arg	Cys	Arg	Arg	Lys	Asp	Val	Cys
				560					565					570
Lys	Ser	Thr	His	His	Gly	Cys	Glu	His	Ile	Cys	Val	Asn	Asn	Gly
				575					580					585
Asn	Ser	Tyr	Ile	Cys	Lys	Cys	Ser	Glu	Gly	Phe	Val	Leu	Ala	Glu
				590					595					600
Asp	Gly	Arg	Arg	Cys	Lys	Lys	Cys	Thr	Glu	Gly	Pro	Ile	Asp	Leu
				605					610					615
Val	Phe	Val	Ile	Asp	Gly	Ser	Lys	Ser	Leu	Gly	Glu	Glu	Asn	Phe
				620					625					630
Glu	Val	Val	Lys	Gln	Phe	Val	Thr	Gly	Ile	Ile	Asp	Ser	Leu	Thr
				635					640					645
Ile	Ser	Pro	Lys	Ala	Ala	Arg	Val	Gly	Leu	Leu	Gln	Tyr	Ser	Thr
				650					655					660
Gln	Val	His	Thr	Glu	Phe	Thr	Leu	Arg	Asn	Phe	Asn	Ser	Ala	Lys
				665					670					675
Asp	Met	Lys	Lys	Ala	Val	Ala	His	Met	Lys	Tyr	Met	Gly	Lys	Gly
				680					685					690
Ser	Met	Thr	Gly	Leu	Ala	Leu	Lys	His	Met	Phe	Glu	Arg	Ser	Phe
				695					700					705
Thr	Gln	Gly	Glu	Gly	Ala	Arg	Pro	Leu	Ser	Thr	Arg	Val	Pro	Arg
				710					715					720
Ala	Ala	Ile	Val	Phe	Thr	Asp	Gly	Arg	Ala	Gln	Asp	Asp	Val	Ser
				725					730					735
Glu	Trp	Ala	Ser	Lys	Ala	Lys	Ala	Asn	Gly	Ile	Thr	Met	Tyr	Ala
				740					745					750
Val	Gly	Val	Gly	Lys	Ala	Ile	Glu	Glu	Glu	Leu	Gln	Glu	Ile	Ala
				755					760					765
Ser	Glu	Pro	Thr	Asn	Lys	His	Leu	Phe	Tyr	Ala	Glu	Asp	Phe	Ser
				770					775					780
Thr	Met	Asp	Glu	Ile	Ser	Glu	Lys	Leu	Lys	Lys	Gly	Ile	Cys	Glu
				785					790					795
Ala	Leu	Glu	Asp	Ser	Asp	Gly	Arg	Gln	Asp	Ser	Pro	Ala	Gly	Glu
				800					805					810
Leu	Pro	Lys	Thr	Val	Gln	Gln	Pro	Thr	Glu	Ser	Glu	Pro	Val	Thr
				815					820					825
Ile	Asn	Ile	Gln	Asp	Leu	Leu	Ser	Cys	Ser	Asn	Phe	Ala	Val	Gln
				830					835					840
His	Arg	Tyr	Leu	Phe	Glu	Glu	Asp	Asn	Leu	Leu	Arg	Ser	Thr	Gln
				845					850					855



P1618P2C2 sequence listing.txt

Lys Leu Ser His Ser Thr Lys Pro Ser Gly Ser Pro Leu Glu Glu  
860 865 870

Lys His Asp Gln Cys Lys Cys Glu Asn Leu Ile Met Phe Gln Asn  
875 880 885

Leu Ala Asn Glu Glu Val Arg Lys Leu Thr Gln Arg Leu Glu Glu  
890 895 900

Met Thr Gln Arg Met Glu Ala Leu Glu Asn Arg Leu Arg Tyr Arg  
905 910 915

<210> 35

<211> 23

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic Oligonucleotide Probe

<400> 35

gtgaccctgg ttgtgaatac tcc 23

<210> 36

<211> 22

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic Oligonucleotide Probe

<400> 36

acagccatgg tctatagctt gg 22

<210> 37

<211> 45

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic Oligonucleotide Probe

<400> 37

gcctgtcagt gtcctgaggg acacgtgctc cgcagcgatg ggaag 45

<210> 38

<211> 1813

<212> DNA

<213> Homo Sapien

<400> 38

ggagccgccc tgggtgtcag cggctcggct cccgcgcacg ctccggccgt 50

cgcgcagcct cggcacctgc aggtccgtgc gtcccgcggc tggcgcccct 100

gactccgtcc cggccagggg gggccatgat ttccctccc gggcccctgg 150

tgaccaactt gctgcggttt ttgttcctgg ggctgagtgc cctcgcgccc 200

ccctcgcggg cccagctgca actgcacttg cccgccaacc ggttgaggc 250

ggtggaggga ggggaagtgg tgcttcagc gtggtacacc ttgcacgggg 300

P1618P2C2 sequence listing.txt

```

agggtgtcttc atcccagcca tgggagggtgc cctttgtgat gtggttcttc 350
aaacagaaaag aaaaggagga tcagggtgttg tcctacatca atggggtcac 400
aacaagcaaaa cctggagtat ccttggtcta ctccatgccc tcccgaacc 450
tgtccctgcg gctggagggg ctccaggaga aagactctgg cccctacagc 500
tgctccgtga atgtgcaaga caaacaaggc aaatctaggg gccacagcat 550
caaaacctta gaactcaatg tactggttcc tccagctcct ccatactgcc 600
gtctctaggg tgtgccccat gtgggggcaa acgtgaccct gagctgccag 650
tctccaagga gtaagcccg tgtccaatac cagtgggatc ggcagcttcc 700
atccttccag actttctttg caccagcatt agatgtcatc cgtgggtctt 750
taagcctcac caacctttcg tcttccatgg ctggagtcta tgtctgcaag 800
gcccacaatg aggtgggcac tgcccaatgt aatgtgacgc tggaagtgag 850
cacagggcct ggagctgcag tggttgctgg agctgttggt ggtaccctgg 900
ttggactggg gttgctggct gggctggtcc tcttgtagca ccgccggggc 950
aaggccctgg aggagccagc caatgatata aaggaggatg ccattgctcc 1000
ccggaccctg ccctggccca agagctcaga cacaatctcc aagaatggga 1050
ccctttcttc tgtcacctcc gcacgagccc tccggccacc ccattggcct 1100
cccaggcctg gtgcattgac cccacgccc agtctctcca gccaggccct 1150
gccctacca agactgccc cgacagatgg ggcccaccct caaccaatat 1200
ccccatccc tgggtggggt tcttctctg gcttgagccg catgggtgct 1250
gtgcctgtga tgggtgcctgc ccagagtcaa gctggctctc tggatatgat 1300
acccaccac tcattggcta aaggatttgg ggtctctcct tcctataagg 1350
gtcacctcta gcacagaggc ctgagtcatg ggaaagagtc acactcctga 1400
cccttagtac tctgccccca cctctcttta ctgtgggaaa accatctcag 1450
taagacctaa gtgtccagga gacagaagga gaagaggaag tggatctgga 1500
attgggagga gcctccaccc acccctgact cctccttatg aagccagctg 1550
ctgaaattag ctactacca agagtgaggg gcagagactt ccagtcactg 1600
agtctcccag gcccccttga tctgtacccc acccctatct aacaccaccc 1650
ttggctccca ctccagctcc ctgtattgat ataacctgtc aggctggctt 1700
ggttaggttt tactggggca gaggataggg aatctcttat taaaactaac 1750
atgaaatatg tgttgttttc atttgcaaat ttaaataaag atacataatg 1800
tttgtatgaa aaa 1813

```

P1618P2C2 sequence listing.txt

<211> 390

<212> PRT

<213> Homo Sapien

<400> 39

```

Met Ile Ser Leu Pro Gly Pro Leu Val Thr Asn Leu Leu Arg Phe
 1          5          10          15
Leu Phe Leu Gly Leu Ser Ala Leu Ala Pro Pro Ser Arg Ala Gln
          20          25          30
Leu Gln Leu His Leu Pro Ala Asn Arg Leu Gln Ala Val Glu Gly
          35          40          45
Gly Glu Val Val Leu Pro Ala Trp Tyr Thr Leu His Gly Glu Val
          50          55          60
Ser Ser Ser Gln Pro Trp Glu Val Pro Phe Val Met Trp Phe Phe
          65          70          75
Lys Gln Lys Glu Lys Glu Asp Gln Val Leu Ser Tyr Ile Asn Gly
          80          85          90
Val Thr Thr Ser Lys Pro Gly Val Ser Leu Val Tyr Ser Met Pro
          95          100          105
Ser Arg Asn Leu Ser Leu Arg Leu Glu Gly Leu Gln Glu Lys Asp
          110          115          120
Ser Gly Pro Tyr Ser Cys Ser Val Asn Val Gln Asp Lys Gln Gly
          125          130          135
Lys Ser Arg Gly His Ser Ile Lys Thr Leu Glu Leu Asn Val Leu
          140          145          150
Val Pro Pro Ala Pro Pro Ser Cys Arg Leu Gln Gly Val Pro His
          155          160          165
Val Gly Ala Asn Val Thr Leu Ser Cys Gln Ser Pro Arg Ser Lys
          170          175          180
Pro Ala Val Gln Tyr Gln Trp Asp Arg Gln Leu Pro Ser Phe Gln
          185          190          195
Thr Phe Phe Ala Pro Ala Leu Asp Val Ile Arg Gly Ser Leu Ser
          200          205          210
Leu Thr Asn Leu Ser Ser Ser Met Ala Gly Val Tyr Val Cys Lys
          215          220          225
Ala His Asn Glu Val Gly Thr Ala Gln Cys Asn Val Thr Leu Glu
          230          235          240
Val Ser Thr Gly Pro Gly Ala Ala Val Val Ala Gly Ala Val Val
          245          250          255
Gly Thr Leu Val Gly Leu Gly Leu Leu Ala Gly Leu Val Leu Leu
          260          265          270
Tyr His Arg Arg Gly Lys Ala Leu Glu Glu Pro Ala Asn Asp Ile
          275          280          285
Lys Glu Asp Ala Ile Ala Pro Arg Thr Leu Pro Trp Pro Lys Ser

```

P1618P2C2 sequence listing.txt

290

295

300

Ser Asp Thr Ile Ser Lys Asn Gly Thr Leu Ser Ser Val Thr Ser  
305 310 315

Ala Arg Ala Leu Arg Pro Pro His Gly Pro Pro Arg Pro Gly Ala  
320 325 330

Leu Thr Pro Thr Pro Ser Leu Ser Ser Gln Ala Leu Pro Ser Pro  
335 340 345

Arg Leu Pro Thr Thr Asp Gly Ala His Pro Gln Pro Ile Ser Pro  
350 355 360

Ile Pro Gly Gly Val Ser Ser Ser Gly Leu Ser Arg Met Gly Ala  
365 370 375

Val Pro Val Met Val Pro Ala Gln Ser Gln Ala Gly Ser Leu Val  
380 385 390

<210> 40

<211> 22

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic Oligonucleotide Probe

<400> 40

agggtctcca ggagaaagac tc 22

<210> 41

<211> 24

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic Oligonucleotide Probe

<400> 41

attgtgggcc ttgcagacat agac 24

<210> 42

<211> 50

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic Oligonucleotide Probe

<400> 42

ggccacagca tcaaaacctt agaactcaat gtactgggtc ctccagctcc 50

<210> 43

<211> 18

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic Oligonucleotide Probe

<400> 43

gtgtgacaca gcgtgggc 18

P1618P2C2 sequence listing.txt

<210> 44  
<211> 18  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Synthetic Oligonucleotide Probe

<400> 44  
gaccggcagg cttctgcg 18

<210> 45  
<211> 25  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Synthetic Oligonucleotide Probe

<400> 45  
cagcagcttc agccaccagg agtgg 25

<210> 46  
<211> 24  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Synthetic Oligonucleotide Probe

<400> 46  
ctgagccgtg ggctgcagtc tcgc 24

<210> 47  
<211> 45  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Synthetic Oligonucleotide Probe

<400> 47  
ccgactacga ctggttcttc atcatgcagg atgacacata tgtgc 45

<210> 48  
<211> 2822  
<212> DNA  
<213> Homo Sapien

<400> 48  
cgccaccact gcggccaccg ccaatgaaac gcctcccgt cctagtgggtt 50  
ttttccactt tggtgaattg ttcctatact caaaattgca ccaagacacc 100  
ttgtctccca aatgcaaaat gtgaaatagc caatggaatt gaagcctgct 150  
attgcaacat gggattttca ggaaatgggtg tcacaatttg tgaagatgat 200  
aatgaatgtg gaaatttaac tcagtcctgt ggcgaaaatg ctaattgcac 250  
taacacagaa ggaagttatt attgtatgtg tgtacctggc ttcagatcca 300

P1618P2C2 sequence listing.txt

gcagtaacca agacaggttt atcactaatg atggaaccgt ctgtatagaa 350  
aatgtgaatg caaactgcc a ttagataat gtctgtatag ctgcaaata 400  
taataaaaact ttaacaaaa tcagatccat aaaagaacct gtggctttgc 450  
tacaagaagt ctatagaaat tctgtgacag atctttcacc aacagatata 500  
attacatata tagaaatatt agctgaatca tcttcattac taggttacia 550  
gaacaacact atctcagcca aggacaccct ttctaactca actcttactg 600  
aatttgtaaa aaccgtgaat aattttgttc aaagggatac atttgtagtt 650  
tgggacaagt tatctgtgaa tcataggaga acacatctta caaaactcat 700  
gcacactgtt gaacaagcta ctttaaggat atcccagagc ttccaaaaga 750  
ccacagagtt tgatacaaat tcaacggata tagctctcaa agttttcttt 800  
tttgattcat ataacatgaa acatattcat cctcatatga atatggatgg 850  
agactacata aatatatttc caaagagaaa agctgcatat gattcaaata 900  
gcaatgttgc agttgcattt ttatattata agagtattgg tcctttgctt 950  
tcacatctg acaacttctt attgaaacct caaaattatg ataattctga 1000  
agaggaggaa agagtcatat cttcagtaat ttcagtctca atgagctcaa 1050  
acccaccac atttatatgaa cttgaaaaaa taacatttac attaagtcac 1100  
cgaaaggta cagataggta taggagtcta tgtgcatttt ggaattactc 1150  
acctgatacc atgaatggca gctggctctc agagggctgt gagctgacat 1200  
actcaaatga gaccacacc tcatgccgct gtaatcacct gacacatttt 1250  
gcaattttga tgtcctctgg tccttcatt ggtattaaag attataatat 1300  
tcttacaagg atcactcaac taggaataat tatttcactg atttgtcttg 1350  
ccatatgcat ttttaccttc tggttcttca gtgaaattca aagcaccagg 1400  
acaacaattc acaaaaatct ttgctgtagc ctatttcttg ctgaacttgt 1450  
tttcttgtt gggatcaata caaatactaa taagctcttc gttcaatca 1500  
ttgccggact gctacactac ttcttttttag ctgcttttgc atggatgtgc 1550  
attgaaggca tacatctcta tctcattgtt gtgggtgtca tctacaacia 1600  
gggatttttg cacaagaatt ttatatctt tggctatcta agcccagccg 1650  
tggtagtgg attttcgga gcactaggat acagatatta tggcacaacc 1700  
aaagtatgtt ggcttagcac cgaaaacaac ttattttgga gttttatagg 1750  
accagcatgc ctaatcattc ttgttaatct cttggctttt ggagtcacat 1800  
tatacaaagt ttttcgtcac actgcagggt tgaaaccaga agttagtgtc 1850  
tttgagaaca taaggtcttg tgcaagagga gccctcgctc ttctgttcct 1900

P1618P2C2 sequence listing.txt

tctcggcacc acctggatct ttggggttct ccatgttgtg cacgcatcag 1950  
 tggttacagc ttacctcttc acagtcagca atgctttcca ggggatgttc 2000  
 atttttttat tcctgtgtgt tttatctaga aagattcaag aagaatatta 2050  
 cagattgttc aaaaatgtcc cctgttgttt tggatgttta aggtaaacat 2100  
 agagaatggt ggataattac aactgcacaa aaataaaaat tccaagctgt 2150  
 ggatgaccaa tgtataaaaa tgactcatca aattatccaa ttattaacta 2200  
 ctagacaaaa agtattttta atcagttttt ctgtttatgc tataggaaact 2250  
 gtagataata aggtaaaatt atgtatcata tagatatact atgtttttct 2300  
 atgtgaaata gttctgtcaa aaatagtatt gcagatattt ggaaagtaat 2350  
 tggttttcta ggagtgatat cactgcaccc aaggaaagat tttctttcta 2400  
 acacgagaag tatatgaatg tcctgaagga aaccactggc ttgatatttc 2450  
 tgtgactcgt gttgcctttg aaactagtcc cctaccacct cggtaatgag 2500  
 ctccattaca gaaagtggaa cataagagaa tgaaggggca gaatatcaaa 2550  
 cagtgaaaag ggaatgataa gatgtatttt gaatgaactg ttttttctgt 2600  
 agactagctg agaaattggt gacataaaat aaagaattga agaaacacat 2650  
 tttaccattt tgtgaattgt tctgaactta aatgtccact aaaacaactt 2700  
 agacttctgt ttgctaaatc tgtttctttt tctaatatc taaaaaaaaa 2750  
 aaaaagggtt acctccacaa attgaaaaaa aaaaaaaaaa aaaaaaaaaa 2800  
 aaaaaaaaaa aaaaaaaaaa aa 2822

<210> 49  
 <211> 690  
 <212> PRT  
 <213> Homo Sapien

<400> 49

Met	Lys	Arg	Leu	Pro	Leu	Leu	Val	Val	Phe	Ser	Thr	Leu	Leu	Asn
1				5					10					15
<hr/>														
Cys	Ser	Tyr	Thr	Gln	Asn	Cys	Thr	Lys	Thr	Pro	Cys	Leu	Pro	Asn
				20					25					30
Ala	Lys	Cys	Glu	Ile	Arg	Asn	Gly	Ile	Glu	Ala	Cys	Tyr	Cys	Asn
				35					40					45
Met	Gly	Phe	Ser	Gly	Asn	Gly	Val	Thr	Ile	Cys	Glu	Asp	Asp	Asn
				50					55					60
Glu	Cys	Gly	Asn	Leu	Thr	Gln	Ser	Cys	Gly	Glu	Asn	Ala	Asn	Cys
				65					70					75
Thr	Asn	Thr	Glu	Gly	Ser	Tyr	Tyr	Cys	Met	Cys	Val	Pro	Gly	Phe
				80					85					90

P1618P2C2 sequence listing.txt

Arg Ser Ser Ser	Asn Gln Asp Arg Phe	Ile Thr Asn Asp Gly	Thr
95	100	105	
Val Cys Ile Glu	Asn Val Asn Ala Asn	Cys His Leu Asp Asn	Val
110	115	120	
Cys Ile Ala Ala	Asn Ile Asn Lys Thr	Leu Thr Lys Ile Arg	Ser
125	130	135	
Ile Lys Glu Pro	Val Ala Leu Leu Gln	Glu Val Tyr Arg Asn	Ser
140	145	150	
Val Thr Asp Leu	Ser Pro Thr Asp Ile	Ile Thr Tyr Ile Glu	Ile
155	160	165	
Leu Ala Glu Ser	Ser Ser Leu Leu Gly	Tyr Lys Asn Asn Thr	Ile
170	175	180	
Ser Ala Lys Asp	Thr Leu Ser Asn Ser	Thr Leu Thr Glu Phe	Val
185	190	195	
Lys Thr Val Asn	Asn Phe Val Gln Arg	Asp Thr Phe Val Val	Trp
200	205	210	
Asp Lys Leu Ser	Val Asn His Arg Arg	Thr His Leu Thr Lys	Leu
215	220	225	
Met His Thr Val	Glu Gln Ala Thr Leu	Arg Ile Ser Gln Ser	Phe
230	235	240	
Gln Lys Thr Thr	Glu Phe Asp Thr Asn	Ser Thr Asp Ile Ala	Leu
245	250	255	
Lys Val Phe Phe	Phe Asp Ser Tyr Asn	Met Lys His Ile His	Pro
260	265	270	
His Met Asn Met	Asp Gly Asp Tyr Ile	Asn Ile Phe Pro Lys	Arg
275	280	285	
Lys Ala Ala Tyr	Asp Ser Asn Gly Asn	Val Ala Val Ala Phe	Leu
290	295	300	
Tyr Tyr Lys Ser	Ile Gly Pro Leu Leu	Ser Ser Ser Asp Asn	Phe
305	310	315	
Leu Leu Lys Pro	Gln Asn Tyr Asp Asn	Ser Glu Glu Glu Glu	Arg
320	325	330	
Val Ile Ser Ser	Val Ile Ser Val Ser	Met Ser Ser Asn Pro	Pro
335	340	345	
Thr Leu Tyr Glu	Leu Glu Lys Ile Thr	Phe Thr Leu Ser His	Arg
350	355	360	
Lys Val Thr Asp	Arg Tyr Arg Ser Leu	Cys Ala Phe Trp Asn	Tyr
365	370	375	
Ser Pro Asp Thr	Met Asn Gly Ser Trp	Ser Ser Glu Gly Cys	Glu
380	385	390	
Leu Thr Tyr Ser	Asn Glu Thr His Thr	Ser Cys Arg Cys Asn	His
395	400	405	



P1618P2C2 sequence listing.txt

Leu Thr His Phe	Ala Ile Leu Met Ser	Ser Gly Pro Ser Ile	Gly
410		415	420
Ile Lys Asp Tyr	Asn Ile Leu Thr Arg	Ile Thr Gln Leu Gly	Ile
425		430	435
Ile Ile Ser Leu	Ile Cys Leu Ala Ile	Cys Ile Phe Thr Phe	Trp
440		445	450
Phe Phe Ser Glu	Ile Gln Ser Thr Arg	Thr Thr Ile His Lys	Asn
455		460	465
Leu Cys Cys Ser	Leu Phe Leu Ala Glu	Leu Val Phe Leu Val	Gly
470		475	480
Ile Asn Thr Asn	Thr Asn Lys Leu Phe	Cys Ser Ile Ile Ala	Gly
485		490	495
Leu Leu His Tyr	Phe Phe Leu Ala Ala	Phe Ala Trp Met Cys	Ile
500		505	510
Glu Gly Ile His	Leu Tyr Leu Ile Val	Val Gly Val Ile Tyr	Asn
515		520	525
Lys Gly Phe Leu	His Lys Asn Phe Tyr	Ile Phe Gly Tyr Leu	Ser
530		535	540
Pro Ala Val Val	Val Gly Phe Ser Ala	Ala Leu Gly Tyr Arg	Tyr
545		550	555
Tyr Gly Thr Thr	Lys Val Cys Trp Leu	Ser Thr Glu Asn Asn	Phe
560		565	570
Ile Trp Ser Phe	Ile Gly Pro Ala Cys	Leu Ile Ile Leu Val	Asn
575		580	585
Leu Leu Ala Phe	Gly Val Ile Ile Tyr	Lys Val Phe Arg His	Thr
590		595	600
Ala Gly Leu Lys	Pro Glu Val Ser Cys	Phe Glu Asn Ile Arg	Ser
605		610	615
Cys Ala Arg Gly	Ala Leu Ala Leu Leu	Phe Leu Leu Gly Thr	Thr
620		625	630
Trp Ile Phe Gly	Val Leu His Val Val	His Ala Ser Val Val	Thr
635		640	645
Ala Tyr Leu Phe	Thr Val Ser Asn Ala	Phe Gln Gly Met Phe	Ile
650		655	660
Phe Leu Phe Leu	Cys Val Leu Ser Arg	Lys Ile Gln Glu Glu	Tyr
665		670	675
Tyr Arg Leu Phe	Lys Asn Val Pro Cys	Cys Phe Gly Cys Leu	Arg
680		685	690

<210> 50  
 <211> 589  
 <212> DNA  
 <213> Homo Sapien

<220>

P1618P2C2 sequence listing.txt

<221> unsure  
<222> 61  
<223> unknown base

<400> 50  
tggaacata tcctccctca tatgaatatg gatggagact acataaatat 50  
atttccaaag ngaaaagccg gcatatggat tcaaatggca atgttgcagt 100  
tgcattttta tattataaga gtattgggtcc ctttgctttc atcatctgac 150  
aacttcttat tgaaacctca aaattatgat aattctgaag aggaggaaaag 200  
agtcatatct tcagtaattt cagtctcaat gagctcaaac ccaccacat 250  
tatatgaact tgaaaaaata acatttacat taagtcacg aaaggtcaca 300  
gataggtata ggagtctatg tggcattttg gaatactcac ctgataccat 350  
gaatggcagc tggctttcag agggctgtga gctgacatac tcaaatgaga 400  
cccacacctc atgccgctgt aatcacctga cacattttgc aattttgatg 450  
tcctctgggtc cttccattgg tattaaagat tataatattc ttacaaggat 500  
cactcaacta ggaataatta tttcactgat ttgtcttgcc atatgcattt 550  
ttaccttctg gttcttcagt gaaattcaaa gcaccagga 589

<210> 51  
<211> 20  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Synthetic Oligonucleotide Probe

<400> 51  
ggtaatgagc tccattacag 20

<210> 52  
<211> 18  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Synthetic Oligonucleotide Probe

<400> 52  
ggagtagaaa gcgcatgg 18

<210> 53  
<211> 22  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Synthetic Oligonucleotide Probe

<400> 53  
cacctgatac catgaatggc ag 22

<210> 54

P1618P2C2 sequence listing.txt

<211> 18  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Synthetic Oligonucleotide Probe

<400> 54  
 cgagctcgaa ttaattcg 18

<210> 55  
 <211> 18  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Synthetic Oligonucleotide Probe

<400> 55  
 ggatctcctg agctcagg 18

<210> 56  
 <211> 23  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Synthetic Oligonucleotide Probe

<400> 56  
 cctagttgag tgatccttgt aag 23

<210> 57  
 <211> 50  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Synthetic Oligonucleotide Probe

<400> 57  
 atgagacca cacctcatgc cgctgtaatc acctgacaca ttttgcaatt 50

<210> 58  
 <211> 2137  
 <212> DNA  
 <213> Homo Sapien

---

<400> 58  
 gctcccagcc aagaacctcg gggccgctgc gcggtgggga ggagttcccc 50  
 gaaacccggc cgctaagcga ggcctcctcc tcccgcagat ccgaacggcc 100  
 tgggcgggggt caccctggct gggacaagaa gccgccgcct gcctgcccgg 150  
 gcccggggag ggggctgggg ctggggccgg aggcgggggtg tgagtgggtg 200  
 tgtgcggggg gcggaggctt gatgcaatcc cgataagaaa tgctcggtg 250  
 tcttgggcac ctaccctgg ggcccgtgag gcgctactat ataaggctgc 300  
 cgccccggag ccgccgcgcc gtcagagcag gagcgctgcg tccaggatct 350

P1618P2C2 sequence listing.txt

agggccacga ccatcccaac ccggcactca cagccccgca gcgcatcccg 400  
 gtcgccgccc agcctcccgc acccccatcg ccggagctgc gccgagagcc 450  
 ccagggaggt gccatgcgga gcgggtgtgt ggtggtccac gtatggatcc 500  
 tggccggcct ctggctggcc gtggccgggc gccccctcgc cttctcggac 550  
 gcggggcccc acgtgcacta cggctggggc gaccccatcc gcctgcggca 600  
 cctgtacacc tccggcccc acgggctctc cagctgcttc ctgcgcatcc 650  
 gtgccgacgg cgtcgtggac tgcgcgcggg gccagagcgc gcacagtttg 700  
 ctggagatca aggcagtcgc tctgcggacc gtggccatca agggcgtgca 750  
 cagcgtgcgg tacctctgca tgggcgccga cggcaagatg caggggctgc 800  
 ttcagtactc ggaggaagac tgtgctttcg aggaggagat ccgcccagat 850  
 ggctacaatg tgtaccgatc cgagaagcac cgctcccgg tctccctgag 900  
 cagtgccaaa cagcggcagc tgtacaagaa cagaggcttt cttccactct 950  
 ctcatttcct gcccatgctg cccatggtcc cagaggagcc tgaggacctc 1000  
 agggggccact tggaaatctga catgttctct tcgcccctgg agaccgacag 1050  
 catggacca tttgggcttg tcaccggact ggaggccgtg aggagtcca 1100  
 gctttgagaa gtaactgaga ccatgcccgg gcctcttcac tgctgccagg 1150  
 ggctgtggta cctgcagcgt gggggacgtg cttctacaag aacagtcctg 1200  
 agtccacgtt ctgtttagct ttaggaagaa acatctagaa gttgtacata 1250  
 ttcagagttt tccattggca gtgccagttt ctagccaata gacttgtctg 1300  
 atcataacat tgtaagcctg tagcttgccc agctgctgcc tgggccccca 1350  
 ttctgctccc tcgaggttgc tggacaagct gctgcactgt ctcagttctg 1400  
 cttgaatacc tccatcgatg gggaaactcac ttcctttgga aaaattctta 1450  
 tgtcaagctg aaattctcta attttttctc atcacttccc caggagcagc 1500  
 cagaagacag gcagtagttt taatttcagg aacaggatgat ccactctgta 1550  
 aaacagcagg taaatttcac tcaaccccat gtggaattg atctatatct 1600  
 ctacttccag ggaccatttg cccttcccaa atccctccag gccagaactg 1650  
 actggagcag gcatggccca ccaggcttca ggagtagggg aagcctggag 1700  
 ccccatcca gccctgggac aacttgagaa ttccccctga ggccagttct 1750  
 gtcatggatg ctgtcctgag aataacttgc tgtcccgggtg tcacctgctt 1800  
 ccatctcca gccaccagc cctctgcca cctcacatgc ctccccatgg 1850  
 attggggcct ccagggcccc ccaccttatg tcaacctgca cttcttgttc 1900  
 aaaaatcagg aaaagaaaag atttgaagac cccaagtctt gtcaataact 1950

P1618P2C2 sequence listing.txt

tgctgtgtgg aagcagcggg ggaagaccta gaaccctttc cccagcactt 2000  
 ggttttccaa catgatattt atgagtaatt tattttgata tgtacatctc 2050  
 ttattttctt acattattta tgcccccaaa ttatatttat gtatgtaagt 2100  
 gaggtttgtt ttgtatatta aaatggagtt tgtttgt 2137

<210> 59  
 <211> 216  
 <212> PRT  
 <213> Homo Sapien

<400> 59  
 Met Arg Ser Gly Cys Val Val Val His Val Trp Ile Leu Ala Gly  
 1 5 10 15  
 Leu Trp Leu Ala Val Ala Gly Arg Pro Leu Ala Phe Ser Asp Ala  
 20 25 30  
 Gly Pro His Val His Tyr Gly Trp Gly Asp Pro Ile Arg Leu Arg  
 35 40 45  
 His Leu Tyr Thr Ser Gly Pro His Gly Leu Ser Ser Cys Phe Leu  
 50 55 60  
 Arg Ile Arg Ala Asp Gly Val Val Asp Cys Ala Arg Gly Gln Ser  
 65 70 75  
 Ala His Ser Leu Leu Glu Ile Lys Ala Val Ala Leu Arg Thr Val  
 80 85 90  
 Ala Ile Lys Gly Val His Ser Val Arg Tyr Leu Cys Met Gly Ala  
 95 100 105  
 Asp Gly Lys Met Gln Gly Leu Leu Gln Tyr Ser Glu Glu Asp Cys  
 110 115 120  
 Ala Phe Glu Glu Glu Ile Arg Pro Asp Gly Tyr Asn Val Tyr Arg  
 125 130 135  
 Ser Glu Lys His Arg Leu Pro Val Ser Leu Ser Ser Ala Lys Gln  
 140 145 150  
 Arg Gln Leu Tyr Lys Asn Arg Gly Phe Leu Pro Leu Ser His Phe  
 155 160 165  
 Leu Pro Met Leu Pro Met Val Pro Glu Glu Pro Glu Asp Leu Arg  
 170 175 180  
 Gly His Leu Glu Ser Asp Met Phe Ser Ser Pro Leu Glu Thr Asp  
 185 190 195  
 Ser Met Asp Pro Phe Gly Leu Val Thr Gly Leu Glu Ala Val Arg  
 200 205 210  
 Ser Pro Ser Phe Glu Lys  
 215

<210> 60  
 <211> 26  
 <212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic Oligonucleotide Probe

<400> 60

atccgcccag atggctacaa tgtgta 26

<210> 61

<211> 42

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic Oligonucleotide Probe

<400> 61

gcctcccggg ctccctgagc agtgccaaac agcggcagtg ta 42

<210> 62

<211> 22

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic Oligonucleotide Probe

<400> 62

ccagtccggg gacaagccca aa 22

<210> 63

<211> 1295

<212> DNA

<213> Homo Sapien

<400> 63

cccagaagtt caaggggccc cggcctcctg cgctcctgcc gccgggaccc 50

tcgacctcct cagagcagcc ggctgccgcc ccgggaagat ggcgaggagg 100

agccgccacc gcctcctcct gctgctgctg cgctacctgg tggtcgccct 150

gggctatcat aaggcctatg ggttttctgc cccaaaagac caacaagtag 200

tcacagcagt agagtaccaa gaggctatgt tagcctgcaa aaccccaaag 250

aagactgttt cctccagatt agagtggaag aaactgggtc ggagtgtctc 300

ctttgtctac tatcaacaga ctcttcaagg tgattttaaa aatcgagctg 350

agatgataga tttcaatatc cggatcaaaa atgtgacaag aagtgatgag 400

gggaaatatc gttgtgaagt tagtgcccca tctgagcaag gccaaaacct 450

ggaagaggat acagtcactc tggaagtatt agtggctcca gcagttccat 500

catgtgaagt accctcttct gctctgagtg gaactgtggt agagctacga 550

tgtcaagaca aagaagggaa tccagctcct gaatacacat ggtttaagga 600

tggcatccgt ttgctagaaa atcccagact tggctcccaa agcaccaaca 650

gctcatacac aatgaatata aaaactggaa ctctgcaatt taatactgtt 700

P1618P2C2 sequence listing.txt

tccaaactgg acactggaga atattcctgt gaagcccgca attctgttgg 750  
 atatcgcagg tgtcctggga aacgaatgca agtagatgat ctcaacataa 800  
 gtggcatcat agcagccgta gtagttgtgg ccttagtgat ttccgtttgt 850  
 ggccttggtg tatgctatgc tcagaggaaa ggctactttt caaaagaaac 900  
 ctccttccag aagagtaatt cttcatctaa agccacgaca atgagtgaaa 950  
 atgtgcagtg gctcacgcct gtaatcccag cactttggaa ggccgcggcg 1000  
 ggcggatcac gaggtcagga gttctagacc agtctggcca atatggtgaa 1050  
 accccatctc tactaaaata caaaaattag ctgggcatgg tggcatgtgc 1100  
 ctgcagttcc agctgcttgg gagacaggag aatcacttga acccgggagg 1150  
 cggaggttgc agtgagctga gatcacgcca ctgcagtcca gcctgggtaa 1200  
 cagagcaaga ttccatctca aaaaataaaa taaataaata aataaataact 1250  
 ggtttttacc tgtagaattc ttacaataaa tatagcttga tattc 1295

<210> 64  
 <211> 312  
 <212> PRT  
 <213> Homo Sapien

<400> 64  
 Met Ala Arg Arg Ser Arg His Arg Leu Leu Leu Leu Leu Arg  
 1 5 10 15  
 Tyr Leu Val Val Ala Leu Gly Tyr His Lys Ala Tyr Gly Phe Ser  
 20 25 30  
 Ala Pro Lys Asp Gln Gln Val Val Thr Ala Val Glu Tyr Gln Glu  
 35 40 45  
 Ala Ile Leu Ala Cys Lys Thr Pro Lys Lys Thr Val Ser Ser Arg  
 50 55 60  
 Leu Glu Trp Lys Lys Leu Gly Arg Ser Val Ser Phe Val Tyr Tyr  
 65 70 75  
 Gln Gln Thr Leu Gln Gly Asp Phe Lys Asn Arg Ala Glu Met Ile  
 80 85 90  
 Asp Phe Asn Ile Arg Ile Lys Asn Val Thr Arg Ser Asp Ala Gly  
 95 100 105  
 Lys Tyr Arg Cys Glu Val Ser Ala Pro Ser Glu Gln Gly Gln Asn  
 110 115 120  
 Leu Glu Glu Asp Thr Val Thr Leu Glu Val Leu Val Ala Pro Ala  
 125 130 135  
 Val Pro Ser Cys Glu Val Pro Ser Ser Ala Leu Ser Gly Thr Val  
 140 145 150  
 Val Glu Leu Arg Cys Gln Asp Lys Glu Gly Asn Pro Ala Pro Glu  
 155 160 165

P1618P2C2 sequence listing.txt

Tyr	Thr	Trp	Phe	Lys	Asp	Gly	Ile	Arg	Leu	Leu	Glu	Asn	Pro	Arg
				170					175					180
Leu	Gly	Ser	Gln	Ser	Thr	Asn	Ser	Ser	Tyr	Thr	Met	Asn	Thr	Lys
				185					190					195
Thr	Gly	Thr	Leu	Gln	Phe	Asn	Thr	Val	Ser	Lys	Leu	Asp	Thr	Gly
				200					205					210
Glu	Tyr	Ser	Cys	Glu	Ala	Arg	Asn	Ser	Val	Gly	Tyr	Arg	Arg	Cys
				215					220					225
Pro	Gly	Lys	Arg	Met	Gln	Val	Asp	Asp	Leu	Asn	Ile	Ser	Gly	Ile
				230					235					240
Ile	Ala	Ala	Val	Val	Val	Val	Ala	Leu	Val	Ile	Ser	Val	Cys	Gly
				245					250					255
Leu	Gly	Val	Cys	Tyr	Ala	Gln	Arg	Lys	Gly	Tyr	Phe	Ser	Lys	Glu
				260					265					270
Thr	Ser	Phe	Gln	Lys	Ser	Asn	Ser	Ser	Ser	Lys	Ala	Thr	Thr	Met
				275					280					285
Ser	Glu	Asn	Val	Gln	Trp	Leu	Thr	Pro	Val	Ile	Pro	Ala	Leu	Trp
				290					295					300
Lys	Ala	Ala	Ala	Gly	Gly	Ser	Arg	Gly	Gln	Glu	Phe			
				305					310					

<210> 65

<211> 22

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic Oligonucleotide Probe

<400> 65

atcgttgtga agttagtgcc cc 22

<210> 66

<211> 23

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic Oligonucleotide Probe

<400> 66

acctgcgata tccaacagaa ttg 23

<210> 67

<211> 48

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic Oligonucleotide Probe

<400> 67

ggaagaggat acagtcactc tggaagtatt agtggctcca gcagttcc 48



P1618P2C2 sequence listing.txt

<210> 68  
 <211> 2639  
 <212> DNA  
 <213> Homo Sapien

<400> 68  
 gacatcggag gtgggctagc actgaaactg cttttcaaga cgaggaagag 50  
 gaggagaaag agaaagaaga ggaagatggt gggcaacatt tatttaacat 100  
 gctccacagc ccggaccctg gcatcatgct gctattcctg caaatactga 150  
 agaagcatgg gatttaaata ttttacttct aaataaatga attactcaat 200  
 ctcttatgac catctataca tactccacct tcaaaaagta catcaatatt 250  
 atatcattaa ggaaatagta accttctctt ctccaatatg catgacattt 300  
 ttggacaatg caattgtggc actggcactt atttcagtga agaaaaactt 350  
 tgtggttcta tggcattcat catttgacaa atgcaagcat cttccttatc 400  
 aatcagctcc tattgaactt actagcactg actgtggaat ccttaagggc 450  
 ccattacatt tctgaagaag aaagctaaga tgaaggacat gccactccga 500  
 attcatgtgc tacttggcct agctatcact acactagtac aagctgtaga 550  
 taaaaaagtg gattgtccac gggttatgtac gtgtgaaatc aggccttggt 600  
 ttacaccag atccatttat atggaagcat ctacagtga ttgtaatgat 650  
 ttaggtcttt taactttccc agccagattg ccagctaaca cacagattct 700  
 tctcttacag actaacaata ttgcaaaaat tgaatactcc acagactttc 750  
 cagtaaacct tactggcctg gatttatctc aaaacaattt atcttcagtc 800  
 accaatatta atgtaaaaaa gatgcctcag ctcttttctg tgtacctaga 850  
 ggaaaacaaa cttactgaac tgcctgaaaa atgtctgtcc gaactgagca 900  
 acttacaaga actctatatt aatcacaact tgctttctac aatttcacct 950  
 ggagccttta ttggcctaca taatcttctt cgacttcac tcaattcaaa 1000  
 tagattgcag atgatcaaca gtaagtgggt tgatgctctt ccaaacttag 1050  
 agattctgat gattggggaa aatccaatta tcagaatcaa agacatgaac 1100  
 ttttagcctc ttatcaatct tcgcagcctg gttatagctg gtataaacct 1150  
 cacagaaata ccagataacg ccttggttgg actggaaaac ttagaaagca 1200  
 tctcttttta cgataacagg cttattaaag taccatgt tgctcttcaa 1250  
 aaagttgtaa atctcaaatt tttggatcta aataaaaatc ctattaatag 1300  
 aatacgaagg ggtgatttta gcaatatgct acacttaaaa gagttgggga 1350  
 taaataatat gcctgagctg atttccatcg atagtcttgc tgtggataac 1400

P1618P2C2 sequence listing.txt

ctgccagatt taagaaaaat agaagctact aacaacccta gattgtctta 1450  
cattcacccc aatgcatttt tcagactccc caagctggaa tcactcatgc 1500  
tgaacagcaa tgctctcagt gccctgtacc atggtaccat tgagtctctg 1550  
ccaaacctca aggaaatcag catacacagt aaccccatca ggtgtgactg 1600  
tgtcatccgt tggatgaaca tgaacaaaac caacattcga ttcattggagc 1650  
cagattcact gttttgcgtg gaccacactg aattccaagg tcagaatggt 1700  
cggcaagtgc atttcagggg catgatggaa atttgtctcc ctcttatagc 1750  
tcctgagagc tttccttcta atctaaatgt agaagctggg agctatgttt 1800  
cctttcactg tagagctact gcagaaccac agcctgaaat ctactggata 1850  
acaccttctg gtcaaaaact cttgcctaata accctgacag acaagttcta 1900  
tgtccattct gagggaaacac tagatataaa tggcgtaact cccaaagaag 1950  
ggggtttata tacttgtata gcaactaacc tagttggcgc tgacttgaag 2000  
tctgttatga tcaaagtgga tggatctttt ccacaagata acaatggctc 2050  
tttgaatatt aaaataagag atattcaggc caattcagtt ttggtgtcct 2100  
ggaaagcaag ttctaaaatt ctcaaatcta gtgttaaata gacagccttt 2150  
gtcaagactg aaaatttcta tgctgcgcaa agtgctcgaa taccatctga 2200  
tgtcaaggta tataatctta ctcatctgaa tccatcaact gagtataaaa 2250  
tttgtattga tattcccacc atctatcaga aaaacagaaa aaaatgtgta 2300  
aatgtcacca ccaaagggtt gcaccctgat caaaaagagt atgaaaagaa 2350  
taataccaca acacttatgg cctgtcttgg aggccttctg gggattattg 2400  
gtgtgatatg tcttatcagc tgcctctctc cagaaatgaa ctgtgatggt 2450  
ggacacagct atgtgaggaa ttacttacag aaaccaacct ttgcattagg 2500  
tgagctttat cctcctctga taaatctctg ggaagcagga aaagaaaaaa 2550  
gtacatcact gaaagtaaaa gcaactgtta taggtttacc aacaaatatg 2600

tcctaaaaac caccaaggaa acctactcca aaaatgaac 2639

<210> 69

<211> 708

<212> PRT

<213> Homo Sapien

<400> 69

Met Lys Asp Met Pro Leu Arg Ile His Val Leu Leu Gly Leu Ala  
1 5 10 15

Ile Thr Thr Leu Val Gln Ala Val Asp Lys Lys Val Asp Cys Pro  
20 25 30

Arg Leu Cys Thr Cys Glu Ile Arg Pro Trp Phe Thr Pro Arg Ser

P1618P2C2 sequence listing.txt

35 40 45

Ile Tyr Met Glu Ala Ser Thr Val Asp Cys Asn Asp Leu Gly Leu  
50 55 60

Leu Thr Phe Pro Ala Arg Leu Pro Ala Asn Thr Gln Ile Leu Leu  
65 70 75

Leu Gln Thr Asn Asn Ile Ala Lys Ile Glu Tyr Ser Thr Asp Phe  
80 85 90

Pro Val Asn Leu Thr Gly Leu Asp Leu Ser Gln Asn Asn Leu Ser  
95 100 105

Ser Val Thr Asn Ile Asn Val Lys Lys Met Pro Gln Leu Leu Ser  
110 115 120

Val Tyr Leu Glu Glu Asn Lys Leu Thr Glu Leu Pro Glu Lys Cys  
125 130 135

Leu Ser Glu Leu Ser Asn Leu Gln Glu Leu Tyr Ile Asn His Asn  
140 145 150

Leu Leu Ser Thr Ile Ser Pro Gly Ala Phe Ile Gly Leu His Asn  
155 160 165

Leu Leu Arg Leu His Leu Asn Ser Asn Arg Leu Gln Met Ile Asn  
170 175 180

Ser Lys Trp Phe Asp Ala Leu Pro Asn Leu Glu Ile Leu Met Ile  
185 190 195

Gly Glu Asn Pro Ile Ile Arg Ile Lys Asp Met Asn Phe Lys Pro  
200 205 210

Leu Ile Asn Leu Arg Ser Leu Val Ile Ala Gly Ile Asn Leu Thr  
215 220 225

Glu Ile Pro Asp Asn Ala Leu Val Gly Leu Glu Asn Leu Glu Ser  
230 235 240

Ile Ser Phe Tyr Asp Asn Arg Leu Ile Lys Val Pro His Val Ala  
245 250 255

Leu Gln Lys Val Val Asn Leu Lys Phe Leu Asp Leu Asn Lys Asn  
260 265 270

Pro Ile Asn Arg Ile Arg Arg Gly Asp Phe Ser Asn Met Leu His  
275 280 285

Leu Lys Glu Leu Gly Ile Asn Asn Met Pro Glu Leu Ile Ser Ile  
290 295 300

Asp Ser Leu Ala Val Asp Asn Leu Pro Asp Leu Arg Lys Ile Glu  
305 310 315

Ala Thr Asn Asn Pro Arg Leu Ser Tyr Ile His Pro Asn Ala Phe  
320 325 330

Phe Arg Leu Pro Lys Leu Glu Ser Leu Met Leu Asn Ser Asn Ala  
335 340 345

Leu Ser Ala Leu Tyr His Gly Thr Ile Glu Ser Leu Pro Asn Leu

P1618P2C2 sequence listing.txt

350		355		360
Lys Glu Ile Ser	Ile His Ser Asn Pro	Ile Arg Cys Asp Cys	Val	
365		370		375
Ile Arg Trp Met	Asn Met Asn Lys Thr	Asn Ile Arg Phe Met	Glu	
380		385		390
Pro Asp Ser Leu	Phe Cys Val Asp Pro	Pro Glu Phe Gln Gly	Gln	
395		400		405
Asn Val Arg Gln	Val His Phe Arg Asp	Met Met Glu Ile Cys	Leu	
410		415		420
Pro Leu Ile Ala	Pro Glu Ser Phe Pro	Ser Asn Leu Asn Val	Glu	
425		430		435
Ala Gly Ser Tyr	Val Ser Phe His Cys	Arg Ala Thr Ala Glu	Pro	
440		445		450
Gln Pro Glu Ile	Tyr Trp Ile Thr Pro	Ser Gly Gln Lys Leu	Leu	
455		460		465
Pro Asn Thr Leu	Thr Asp Lys Phe Tyr	Val His Ser Glu Gly	Thr	
470		475		480
Leu Asp Ile Asn	Gly Val Thr Pro Lys	Glu Gly Gly Leu Tyr	Thr	
485		490		495
Cys Ile Ala Thr	Asn Leu Val Gly Ala	Asp Leu Lys Ser Val	Met	
500		505		510
Ile Lys Val Asp	Gly Ser Phe Pro Gln	Asp Asn Asn Gly Ser	Leu	
515		520		525
Asn Ile Lys Ile	Arg Asp Ile Gln Ala	Asn Ser Val Leu Val	Ser	
530		535		540
Trp Lys Ala Ser	Ser Lys Ile Leu Lys	Ser Ser Val Lys Trp	Thr	
545		550		555
Ala Phe Val Lys	Thr Glu Asn Ser His	Ala Ala Gln Ser Ala	Arg	
560		565		570
Ile Pro Ser Asp	Val Lys Val Tyr Asn	Leu Thr His Leu Asn	Pro	
575		580		585
Ser Thr Glu Tyr	Lys Ile Cys Ile Asp	Ile Pro Thr Ile Tyr	Gln	
590		595		600
Lys Asn Arg Lys	Lys Cys Val Asn Val	Thr Thr Lys Gly Leu	His	
605		610		615
Pro Asp Gln Lys	Glu Tyr Glu Lys Asn	Asn Thr Thr Thr Leu	Met	
620		625		630
Ala Cys Leu Gly	Gly Leu Leu Gly Ile	Ile Gly Val Ile Cys	Leu	
635		640		645
Ile Ser Cys Leu	Ser Pro Glu Met Asn	Cys Asp Gly Gly His	Ser	
650		655		660
Tyr Val Arg Asn	Tyr Leu Gln Lys Pro	Thr Phe Ala Leu Gly	Glu	

P1618P2C2 sequence listing.txt

665 670 675

Leu Tyr Pro Pro Leu Ile Asn Leu Trp Glu Ala Gly Lys Glu Lys  
680 685 690

Ser Thr Ser Leu Lys Val Lys Ala Thr Val Ile Gly Leu Pro Thr  
695 700 705

Asn Met Ser

<210> 70  
<211> 1305  
<212> DNA  
<213> Homo Sapien

<400> 70  
gcccgggact ggcgcaaggt gcccaagcaa ggaaagaaat aatgaagaga 50  
cacatgtgtt agctgcagcc ttttgaaaca cgcaagaagg aaatcaatag 100  
tgtggacagg gctggaacct ttaccacgct tgttggagta gatgaggaat 150  
gggctcgtga ttatgctgac attccagcat gaatctggta gacctgtggt 200  
taaccctgttc cctctccatg tgtctcctcc tacaaagttt tgttcttatg 250  
atactgtgct ttcattctgc cagtatgtgt cccaagggtgt gtctttgttc 300  
ttcctctggg ggtttaaatg tcacctgtag caatgcaaat ctcaaggaaa 350  
tacctagaga tcttctcctt gaaacagtct tactgtatct ggactccaat 400  
cagatcacat ctattcccaa tgaaattttt aaggacctcc atcaactgag 450  
agttctcaac ctgtccaaaa atggcattga gtttatcgat gagcatgcct 500  
tcaaaggagt agctgaaacc ttgcagactc tggacttgtc cgacaatcgg 550  
attcaaagtg tgcacaaaaa tgccttcaat aacctgaagg ccagggccag 600  
aattgccaac aacccttggc actgcgactg tactctacag caagttctga 650  
ggagcatggc gtccaatcat gagacagccc acaacgtgat ctgtaaaacg 700  
tccgtgttgg atgaacatgc tggcagacca ttcctcaatg ctgccaacga 750  
cgctgacctt tgtaacctcc ctaaaaaaac taccgattat gccatgctgg 800  
tcacatgttt tggctgggtc actatggtga tctcatatgt ggtatattat 850  
gtgaggcaaa atcaggagga tgcccggaga cacctcgaat acttgaaatc 900  
cctgccaagc aggagaaga aagcagatga acctgatgat attagcactg 950  
tggtatagtg tccaaactga ctgtcattga gaaagaaaga aagtagtttg 1000  
cgattgcagt agaaataagt ggtttacttc tcccatccat tgtaaacatt 1050  
tgaaactttg tatttcagtt ttttttgaat tatgccactg ctgaactttt 1100  
aacaacact acaacataaa taatttgagt ttaggtgatc cacccttaa 1150

PI618P2C2 sequence listing.txt

ttgtaccccc gatggtatat ttctgagtaa gctactatct gaacattagt 1200  
tagatccatc tcactattta ataatgaaat ttattttttt aatttaaaaag 1250  
caaataaaaag ctttaactttg aaccatggga aaaaaaaaaa aaaaaaaaaa 1300  
aaaca 1305

<210> 71  
<211> 259  
<212> PRT  
<213> Homo Sapien

<400> 71  
Met Asn Leu Val Asp Leu Trp Leu Thr Arg Ser Leu Ser Met Cys  
1 5 10 15  
Leu Leu Leu Gln Ser Phe Val Leu Met Ile Leu Cys Phe His Ser  
20 25 30  
Ala Ser Met Cys Pro Lys Gly Cys Leu Cys Ser Ser Ser Gly Gly  
35 40 45  
Leu Asn Val Thr Cys Ser Asn Ala Asn Leu Lys Glu Ile Pro Arg  
50 55 60  
Asp Leu Pro Pro Glu Thr Val Leu Leu Tyr Leu Asp Ser Asn Gln  
65 70 75  
Ile Thr Ser Ile Pro Asn Glu Ile Phe Lys Asp Leu His Gln Leu  
80 85 90  
Arg Val Leu Asn Leu Ser Lys Asn Gly Ile Glu Phe Ile Asp Glu  
95 100 105  
His Ala Phe Lys Gly Val Ala Glu Thr Leu Gln Thr Leu Asp Leu  
110 115 120  
Ser Asp Asn Arg Ile Gln Ser Val His Lys Asn Ala Phe Asn Asn  
125 130 135  
Leu Lys Ala Arg Ala Arg Ile Ala Asn Asn Pro Trp His Cys Asp  
140 145 150  
Cys Thr Leu Gln Gln Val Leu Arg Ser Met Ala Ser Asn His Glu  
155 160 165  
~~Thr Ala His Asn Val Ile Cys Lys Thr Ser Val Leu Asp Glu His~~  
~~170 175 180~~  
Ala Gly Arg Pro Phe Leu Asn Ala Ala Asn Asp Ala Asp Leu Cys  
185 190 195  
Asn Leu Pro Lys Lys Thr Thr Asp Tyr Ala Met Leu Val Thr Met  
200 205 210  
Phe Gly Trp Phe Thr Met Val Ile Ser Tyr Val Val Tyr Tyr Val  
215 220 225  
Arg Gln Asn Gln Glu Asp Ala Arg Arg His Leu Glu Tyr Leu Lys  
230 235 240  
Ser Leu Pro Ser Arg Gln Lys Lys Ala Asp Glu Pro Asp Asp Ile  
Page 46

245

P1618P2C2 sequence listing.txt  
250

255

Ser Thr Val Val

<210> 72  
<211> 2290  
<212> DNA  
<213> Homo Sapien

&lt;400&gt; 72

accgagccga gcggaccgaa ggcgcgcccc agatgcaggt gagcaagagg 50  
atgctggcgg ggggcgtgag gagcatgccc agccccctcc tggcctgctg 100  
gcagcccatc ctctgtctgg tgctgggctc agtgctgtca ggctcggcca 150  
cgggctgccc gccccgctgc gagtgtctccg cccaggaccg cgctgtgctg 200  
tgccaccgca agtgctttgt ggcagtcccc gagggcatcc ccaccgagac 250  
gcgcctgctg gacctaggca agaaccgcat caaaacgctc aaccaggacg 300  
agttcgccag cttcccgac ctggaggagc tggagctcaa cgagaacatc 350  
gtgagcgccg tggagcccgg cgccttcaac aacctcttca acctccggac 400  
gctgggtctc cgcagcaacc gcctgaagct catcccgcta ggcgtcttca 450  
ctggcctcag caacctgacc aagcaggaca tcagcgagaa caagatcggt 500  
atcctactgg actacatgtt tcaggacctg tacaacctca agtcactgga 550  
ggttggcgac aatgacctcg tctacatctc tcaccgcgcc ttcagcggcc 600  
tcaacagcct ggagcagctg acgctggaga aatgcaacct gacctccatc 650  
cccaccgagg cgctgtccca cctgcacggc ctcatcgctc tgaggctccg 700  
gcacctcaac atcaatgcca tccgggacta ctcttcaag aggctgtacc 750  
gactcaaggt cttggagatc tcccactggc cctacttgga caccatgaca 800  
cccaactgcc tctacggcct caacctgacg tcctgtcca tcacacactg 850  
caatctgacc gctgtgccct acctggccgt ccgccaccta gtctatctcc 900  
gcttcctcaa cctctcctac aaccccatca gcaccattga gggctccatg 950  
ttgcatgagc tgctccggct gcaggagatc cagctggtgg gcgggcagct 1000  
ggccgtggtg gagccctatg cttccgcgg cctcaactac ctgcgcgtgc 1050  
tcaatgtctc tggcaaccag ctgaccacac tggaggaatc agtcttccac 1100  
tcggtgggca acctggagac actcatcctg gactccaacc cgctggcctg 1150  
cgactgtcgg ctctgtggg tgttccggcg ccgctggcgg ctcaacttca 1200  
accggcagca gccacgtgc gccacgccc agtttgtcca gggcaaggag 1250  
ttcaaggact tcctgatgt gctactgccc aactacttca cctgccgccg 1300

P1618P2C2 sequence listing.txt

cgcccgcatc cgggaccgca agggccagca ggtgtttgtg gacgagggcc 1350  
acacggtgca gtttgtgtgc cgggccgatg gcgacccgcc gcccgccatc 1400  
ctctggctct caccgcaaa gcacctggtc tcagccaaga gcaatgggcg 1450  
gtcacagtc ttccctgatg gcacgctgga ggtgcgctac gcccgaggtac 1500  
aggacaacgg cacgtacctg tgcctcgcg ccaacgcggg cggcaacgac 1550  
tccatgcccg cccacctgca tgtgcgcagc tactcgcccg actggcccca 1600  
tcagcccaac aagaccttcg ctttcatctc caaccagccg ggcgagggag 1650  
aggccaacag caccgcgcc actgtgcctt tccccttcga catcaagacc 1700  
ctcatcatcg ccaccaccat gggcttcac tctttcctgg gcgtcgtcct 1750  
cttctgcctg gtgctgctgt ttctctggag ccggggcaag ggcaacacaa 1800  
agcacaacat cgagatcgag tatgtgcccc gaaagtcgga cgcaggcatc 1850  
agctccgccg acgcgccccg caagttcaac atgaagatga tatgaggccg 1900  
gggcgggggg cagggacccc cgggcggccg ggcaggggaa ggggcctggt 1950  
cgccacctgc tactctcca gtccttccca cctcctcct acccttctac 2000  
acacgttctc tttctccctc ccgcctccgt cccctgctgc ccccgccag 2050  
ccctcaccac ctgcctcct tctaccagga cctcagaagc ccagacctgg 2100  
ggacccccacc tacacagggg cattgacaga ctggagttga aagccgacga 2150  
accgacacgc ggcagagtca ataattcaat aaaaaagtta cgaactttct 2200  
ctgtaacttg ggtttcaata attatggatt tttatgaaaa cttgaaataa 2250  
taaaaagaga aaaaaactaa aaaaaaaaaa aaaaaaaaaa 2290

<210> 73  
<211> 620  
<212> PRT  
<213> Homo Sapien

<400> 73

Met	Gln	Val	Ser	Lys	Arg	Met	Leu	Ala	Gly	Gly	Val	Arg	Ser	Met
1				5					10					15
Pro	Ser	Pro	Leu	Leu	Ala	Cys	Trp	Gln	Pro	Ile	Leu	Leu	Leu	Val
				20					25					30
Leu	Gly	Ser	Val	Leu	Ser	Gly	Ser	Ala	Thr	Gly	Cys	Pro	Pro	Arg
				35					40					45
Cys	Glu	Cys	Ser	Ala	Gln	Asp	Arg	Ala	Val	Leu	Cys	His	Arg	Lys
				50					55					60
Cys	Phe	Val	Ala	Val	Pro	Glu	Gly	Ile	Pro	Thr	Glu	Thr	Arg	Leu
				65					70					75
Leu	Asp	Leu	Gly	Lys	Asn	Arg	Ile	Lys	Thr	Leu	Asn	Gln	Asp	Glu
				80					85					90



P1618P2C2 sequence listing.txt

Phe Ala Ser Phe	Pro His Leu Glu Glu	Leu Glu Leu Asn Glu	Asn
	95	100	105
Ile Val Ser Ala	Val Glu Pro Gly Ala	Phe Asn Asn Leu Phe	Asn
	110	115	120
Leu Arg Thr Leu	Gly Leu Arg Ser Asn	Arg Leu Lys Leu Ile	Pro
	125	130	135
Leu Gly Val Phe	Thr Gly Leu Ser Asn	Leu Thr Lys Gln Asp	Ile
	140	145	150
Ser Glu Asn Lys	Ile Val Ile Leu Leu	Asp Tyr Met Phe Gln	Asp
	155	160	165
Leu Tyr Asn Leu	Lys Ser Leu Glu Val	Gly Asp Asn Asp Leu	Val
	170	175	180
Tyr Ile Ser His	Arg Ala Phe Ser Gly	Leu Asn Ser Leu Glu	Gln
	185	190	195
Leu Thr Leu Glu	Lys Cys Asn Leu Thr	Ser Ile Pro Thr Glu	Ala
	200	205	210
Leu Ser His Leu	His Gly Leu Ile Val	Leu Arg Leu Arg His	Leu
	215	220	225
Asn Ile Asn Ala	Ile Arg Asp Tyr Ser	Phe Lys Arg Leu Tyr	Arg
	230	235	240
Leu Lys Val Leu	Glu Ile Ser His Trp	Pro Tyr Leu Asp Thr	Met
	245	250	255
Thr Pro Asn Cys	Leu Tyr Gly Leu Asn	Leu Thr Ser Leu Ser	Ile
	260	265	270
Thr His Cys Asn	Leu Thr Ala Val Pro	Tyr Leu Ala Val Arg	His
	275	280	285
Leu Val Tyr Leu	Arg Phe Leu Asn Leu	Ser Tyr Asn Pro Ile	Ser
	290	295	300
Thr Ile Glu Gly	Ser Met Leu His Glu	Leu Leu Arg Leu Gln	Glu
	305	310	315
Ile Gln Leu Val	Gly Gly Gln Leu Ala	Val Val Glu Pro Tyr	Ala
	320	325	330
Phe Arg Gly Leu	Asn Tyr Leu Arg Val	Leu Asn Val Ser Gly	Asn
	335	340	345
Gln Leu Thr Thr	Leu Glu Glu Ser Val	Phe His Ser Val Gly	Asn
	350	355	360
Leu Glu Thr Leu	Ile Leu Asp Ser Asn	Pro Leu Ala Cys Asp	Cys
	365	370	375
Arg Leu Leu Trp	Val Phe Arg Arg Arg	Trp Arg Leu Asn Phe	Asn
	380	385	390
Arg Gln Gln Pro	Thr Cys Ala Thr Pro	Glu Phe Val Gln Gly	Lys
	395	400	405

P1618P2C2 sequence listing.txt

Glu Phe Lys Asp Phe Pro Asp Val Leu Leu Pro Asn Tyr Phe Thr  
410 415 420  
Cys Arg Arg Ala Arg Ile Arg Asp Arg Lys Ala Gln Gln Val Phe  
425 430 435  
Val Asp Glu Gly His Thr Val Gln Phe Val Cys Arg Ala Asp Gly  
440 445 450  
Asp Pro Pro Pro Ala Ile Leu Trp Leu Ser Pro Arg Lys His Leu  
455 460 465  
Val Ser Ala Lys Ser Asn Gly Arg Leu Thr Val Phe Pro Asp Gly  
470 475 480  
Thr Leu Glu Val Arg Tyr Ala Gln Val Gln Asp Asn Gly Thr Tyr  
485 490 495  
Leu Cys Ile Ala Ala Asn Ala Gly Gly Asn Asp Ser Met Pro Ala  
500 505 510  
His Leu His Val Arg Ser Tyr Ser Pro Asp Trp Pro His Gln Pro  
515 520 525  
Asn Lys Thr Phe Ala Phe Ile Ser Asn Gln Pro Gly Glu Gly Glu  
530 535 540  
Ala Asn Ser Thr Arg Ala Thr Val Pro Phe Pro Phe Asp Ile Lys  
545 550 555  
Thr Leu Ile Ile Ala Thr Thr Met Gly Phe Ile Ser Phe Leu Gly  
560 565 570  
Val Val Leu Phe Cys Leu Val Leu Leu Phe Leu Trp Ser Arg Gly  
575 580 585  
Lys Gly Asn Thr Lys His Asn Ile Glu Ile Glu Tyr Val Pro Arg  
590 595 600  
Lys Ser Asp Ala Gly Ile Ser Ser Ala Asp Ala Pro Arg Lys Phe  
605 610 615  
Asn Met Lys Met Ile  
620

<210> 74

<211> 22

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic Oligonucleotide Probe

<400> 74

tcacctggag cttttattgg cc 22

<210> 75

<211> 23

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic Oligonucleotide Probe

<400> 75

ataccagcta taaccaggct gcg 23

<210> 76

<211> 52

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic Oligonucleotide Probe

<400> 76

caacagtaag tggtttgatg ctcttcctaaa tctagagatt ctgatgattg 50

gg 52

<210> 77

<211> 22

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic Oligonucleotide Probe

<400> 77

ccatgtgtct cctcctacaa ag 22

<210> 78

<211> 23

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic Oligonucleotide Probe

<400> 78

gggaatagat gtgatctgat tgg 23

<210> 79

<211> 50

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic Oligonucleotide Probe

<400> 79

cacctgtagc aatgcaaadc tcaaggaaat acctagagat cttcctcctg 50

<210> 80

<211> 22

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic Oligonucleotide Probe

<400> 80

agcaaccgcc tgaagctcat cc 22

<210> 81

P1618P2C2 sequence listing.txt

<211> 24  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Synthetic Oligonucleotide Probe

<400> 81  
 aaggcgcggt gaaagatgta gacg 24

<210> 82  
 <211> 50  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Synthetic Oligonucleotide Probe

<400> 82  
 gactacatgt ttcaggacct gtacaacctc aagtcactgg aggttggcga 50

<210> 83  
 <211> 1685  
 <212> DNA  
 <213> Homo Sapien

<400> 83  
 cccacgcgtc cgcacctcgg ccccgggctc cgaagcggct cgggggcgcc 50  
 ctttcggtca acatcgtagt ccacccccctc cccatcccca gcccccgggg 100  
 attcaggctc gccagcggcc agccaggagg ccggccggga agcgcgatgg 150  
 gggccccagc cgcctcgctc ctgctcctgc tcctgctggt cgcttgctgc 200  
 tgggcgcccc gcgggggcca cctctcccag gacgacagcc agccctggac 250  
 atctgatgaa acagtgggtg ctggtggcac cgtggtgctc aagtgccaaag 300  
 tgaaagatca cgaggactca tccctgcaat ggtctaacc tgctcagcag 350  
 actctctact ttggggagaa gagagccctt cgagataatc gaattcagct 400  
 ggttacctct acgccccacg agctcagcat cagcatcagc aatgtggccc 450  
 tggcagacga gggcgagtac acctgctcaa tcttcactat gcctgtgcga 500  
 actgccaagt cctcgtcac tgtgctagga attccacaga agcccatcat 550  
 cactggttat aaatcttcat tacgggaaaa agacacagcc accctaaact 600  
 gtcagtcttc tgggagcaag cctgcagccc ggctcacctg gagaaagggg 650  
 gaccaagaac tccacggaga accaaccgc atacaggaag atcccaatgg 700  
 taaaaccttc actgtcagca gtcgggtgac attccagggt acccgggagg 750  
 atgatggggc gagcatcgtg tgctctgtga accatgaatc tctaaaggga 800  
 gctgacagat ccacctctca acgcattgaa gttttataca caccaactgc 850  
 gatgattagg ccagaccctc cccatcctcg tgaggggccag aagctgttgc 900

P1618P2C2 sequence listing.txt

tacactgtga gggtcgcggc aatccagtc cccagcagta cctatgggag 950  
aaggagggca gtgtgccacc cctgaagatg acccaggaga gtgccctgat 1000  
cttccctttc ctcaacaaga gtgacagtgg cacctacggc tgcacagcca 1050  
ccagcaacat gggcagctac aaggcctact acaccctcaa tgttaatgac 1100  
cccagtcgag tgccctcctc ctccagcacc taccacgcca tcatcggtgg 1150  
gatcgtggct ttcatgtgtt tctgtgtgct catcatgctc atcttccttg 1200  
gccactactt gatccggcac aaaggaacct acctgacaca tgaggcaaaa 1250  
ggctccgacg atgctccaga cgcggaacag gccatcatca atgcagaagg 1300  
cgggcagtca ggagggggacg acaagaagga atatttcata tagaggcgcc 1350  
tgcccacttc ctgcgcccc cagggggcct gtggggactg ctggggccgt 1400  
caccaaccg gacttgtaga gagcaaccgc agggccgccc ctcccgcttg 1450  
ctccccagcc caccacccc cctgtacaga atgtctgctt tgggtgcggt 1500  
tttgactctg gtttggaatg gggagggagg agggcggggg gaggggaggg 1550  
ttgccctcag ccctttccgt ggcttctctg catttggggtt attattattt 1600  
ttgtaacaat cccaaatcaa atctgtctcc aggctggaga ggcaggagcc 1650  
ctggggtgag aaaagcaaaa aacaacaaa aaaca 1685

<210> 84  
<211> 398  
<212> PRT  
<213> Homo Sapien

<400> 84  
Met Gly Ala Pro Ala Ala Ser Leu Leu Leu Leu Leu Leu Phe  
1 5 10 15  
Ala Cys Cys Trp Ala Pro Gly Gly Ala Asn Leu Ser Gln Asp Asp  
20 25 30  
Ser Gln Pro Trp Thr Ser Asp Glu Thr Val Val Ala Gly Gly Thr  
35 40 45  
Val Val Leu Lys Cys Gln Val Lys Asp His Glu Asp Ser Ser Leu  
50 55 60  
Gln Trp Ser Asn Pro Ala Gln Gln Thr Leu Tyr Phe Gly Glu Lys  
65 70 75  
Arg Ala Leu Arg Asp Asn Arg Ile Gln Leu Val Thr Ser Thr Pro  
80 85 90  
His Glu Leu Ser Ile Ser Ile Ser Asn Val Ala Leu Ala Asp Glu  
95 100 105  
Gly Glu Tyr Thr Cys Ser Ile Phe Thr Met Pro Val Arg Thr Ala  
110 115 120  
Lys Ser Leu Val Thr Val Leu Gly Ile Pro Gln Lys Pro Ile Ile

P1618P2C2 sequence listing.txt

125	130	135
Thr Gly Tyr Lys Ser Ser Leu Arg Glu Lys Asp Thr Ala Thr Leu	140	150
Asn Cys Gln Ser Ser Gly Ser Lys Pro Ala Ala Arg Leu Thr Trp	155	165
Arg Lys Gly Asp Gln Glu Leu His Gly Glu Pro Thr Arg Ile Gln	170	180
Glu Asp Pro Asn Gly Lys Thr Phe Thr Val Ser Ser Ser Val Thr	185	195
Phe Gln Val Thr Arg Glu Asp Asp Gly Ala Ser Ile Val Cys Ser	200	210
Val Asn His Glu Ser Leu Lys Gly Ala Asp Arg Ser Thr Ser Gln	215	225
Arg Ile Glu Val Leu Tyr Thr Pro Thr Ala Met Ile Arg Pro Asp	230	240
Pro Pro His Pro Arg Glu Gly Gln Lys Leu Leu Leu His Cys Glu	245	255
Gly Arg Gly Asn Pro Val Pro Gln Gln Tyr Leu Trp Glu Lys Glu	260	270
Gly Ser Val Pro Pro Leu Lys Met Thr Gln Glu Ser Ala Leu Ile	275	285
Phe Pro Phe Leu Asn Lys Ser Asp Ser Gly Thr Tyr Gly Cys Thr	290	300
Ala Thr Ser Asn Met Gly Ser Tyr Lys Ala Tyr Tyr Thr Leu Asn	305	315
Val Asn Asp Pro Ser Pro Val Pro Ser Ser Ser Thr Tyr His	320	330
Ala Ile Ile Gly Gly Ile Val Ala Phe Ile Val Phe Leu Leu Leu	335	345
Ile Met Leu Ile Phe Leu Gly His Tyr Leu Ile Arg His Lys Gly	350	360
Thr Tyr Leu Thr His Glu Ala Lys Gly Ser Asp Asp Ala Pro Asp	365	375
Ala Asp Thr Ala Ile Ile Asn Ala Glu Gly Gly Gln Ser Gly Gly	380	390
Asp Asp Lys Lys Glu Tyr Phe Ile	395	

<210> 85

<211> 22

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic Oligonucleotide Probe

P1618P2C2 sequence listing.txt

<400> 85  
gctaggaatt ccacagaagc cc 22

<210> 86  
<211> 22  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Synthetic Oligonucleotide Probe

<400> 86  
aacctggaat gtcaccgagc tg 22

<210> 87  
<211> 26  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Synthetic Oligonucleotide Probe

<400> 87  
cctagcacag tgacgagga cttggc 26

<210> 88  
<211> 50  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Synthetic Oligonucleotide Probe

<400> 88  
aagacacagc caccctaaac tgtcagtctt ctgggagcaa gcctgcagcc 50

<210> 89  
<211> 50  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Synthetic Oligonucleotide Sequence

<400> 89  
gccctggcag acgagggcga gtacacctgc tcaatcttca ctatgcctgt 50

<210> 90  
<211> 2755  
<212> DNA  
<213> Homo Sapien

<400> 90  
ggggggttagg gaggaaggaa tccaccccca ccccccaaa cccttttctt 50  
ctcctttcct ggcttcggac attggagcac taaatgaact tgaattgtgt 100  
ctgtggcgag caggatggtc gctgttactt tgtgatgaga tcggggatga 150  
attgctcgct ttaaaaatgc tgctttggat tctgttgctg gagacgtctc 200  
tttgttttgc cgctggaaac gttacagggg acgtttgcaa agagaagatc 250

P1618P2C2 sequence listing.txt

tgttcctgca atgagataga aggggaccta cacgtagact gtgaaaaaaa 300  
 gggcttcaca agtctgcagc gtttctactgc cccgacttcc cagttttacc 350  
 atttatttct gcatggcaat tccctcactc gacttttccc taatgagttc 400  
 gctaactttt ataatgcggt tagtttgcac atggaaaaca atggcttgca 450  
 tgaaatcggt ccgggggctt ttctggggct gcagctggtg aaaaggctgc 500  
 acatcaacaa caacaagatc aagtcttttc gaaagcagac ttttctgggg 550  
 ctggacgatc tggaatatct ccaggctgat tttaatttat tacgagatat 600  
 agacccgggg gccttccagg acttgaacaa gctggagggtg ctcattttta 650  
 atgacaatct catcagcacc ctacctgcca acgtgttcca gtatgtgccc 700  
 atcaccacc tcgacctcg gggtaacagg ctgaaaacgc tgccctatga 750  
 ggaggtcttg gagcaaatcc ctggtattgc ggagatcctg ctagaggata 800  
 acccttgga ctgcacctgt gatctgctct ccctgaaaga atggctggaa 850  
 aacattccca agaatgccct gatcggccga gtggtctgcg aagccccac 900  
 cagactgcag ggtaaagacc tcaatgaaac caccgaacag gacttgtgtc 950  
 ctttgaaaaa ccgagtggat tctagtctcc cggcgcccc tgcccaagaa 1000  
 gagaccttg ctcttgacc cctgccaact ctttcaaga caaatgggca 1050  
 agaggatcat gccacaccag ggtctgctcc aaacggagggt acaaagatcc 1100  
 caggcaactg gcagatcaaa atcagaccca cagcagcgat agcgacgggt 1150  
 agtccagga acaaaccctt agctaacagt ttaccctgcc ctgggggctg 1200  
 cagctgcgac cacatcccag ggtcgggtt aaagatgaac tgcaacaaca 1250  
 ggaacgtgag cagcttggt gatttgaagc ccaagctctc taacgtgcag 1300  
 gagcttttcc tacgagataa caagatccac agcatccgaa aatcgactt 1350  
 tgtggattac aagaacctca ttctgttga tctgggcaac aataacatcg 1400  
 ctactgtaga gaacaacact ttcaagaacc ttttggacct cagggtggcta 1450  
 tacatggata gcaattacct ggacacgctg tcccgggaga aattcgcggg 1500  
 gctgcaaac ctagagtacc tgaacgtgga gtacaacgct atccagctca 1550  
 tcctcccggg cactttcaat gccatgcca aactgaggat cctcattctc 1600  
 aacaacaacc tgctgaggtc cctgcctgtg gacgtgttcg ctggggtctc 1650  
 gctctctaaa ctcagcctgc acaacaatta cttcatgtac ctcccgttg 1700  
 caggggtgct ggaccagtta acctccatca tccagataga cctccacgga 1750  
 aaccctggg agtgctcctg cacaattgtg ctttcaagc agtgggcaga 1800



P1618P2C2 sequence listing.txt

acgcttgggt tccgaagtgc tgatgagcga cctcaagtgt gagacgccgg 1850  
 tgaacttctt tagaaaggat ttcattgctcc tctccaatga cgagatctgc 1900  
 cctcagctgt acgctaggat ctcgcccacg ttaacttcgc acagtaaaaa 1950  
 cagcactggg ttggcggaga ccgggacgca ctccaactcc tacctagaca 2000  
 ccagcagggg gtccatctcg gtgttggtcc cgggactgct gctgggtgttt 2050  
 gtcacctccg ccttcaccgt ggtgggcatg ctcgtgttta tcctgaggaa 2100  
 ccgaaagcgg tccaagagac gagatgccaa ctctccgcg tccgagatta 2150  
 attccctaca gacagtctgt gactcttcct actggcaca tgggccttac 2200  
 aacgcagatg gggcccacag agtgatgac tgtggctctc actcgtctc 2250  
 agactaagac cccaaccca ataggggagg gcagagggaa ggcgatacat 2300  
 ccttccccac cgcaggcacc ccgggggctg gaggggctg tacccaaatc 2350  
 cccgcgccat cagcctggat gggcataagt agataaataa ctgtgagctc 2400  
 gcacaaccga aagggcctga ccccttactt agctccctcc ttgaaacaaa 2450  
 gagcagactg tggagagctg ggagagcgca gccagctcgc tctttgctga 2500  
 gagccccctt tgacagaaag ccagcacga ccctgctgga agaactgaca 2550  
 gtgccctcgc cctcggcccc ggggcctgtg gggttggatg ccgcggttct 2600  
 atacatatat acatatatcc acatctatat agagagatag atatctattt 2650  
 ttcccctgtg gattagcccc gtgatggctc cctgttggct acgcagggat 2700  
 gggcagttgc acgaaggcat gaatgtattg taaataagta actttgactt 2750  
 ctgac 2755

<210> 91

<211> 696

<212> PRT

<213> Homo Sapien

<400> 91

Met	Leu	Leu	Trp	Ile	Leu	Leu	Leu	Glu	Thr	Ser	Leu	Cys	Phe	Ala
1				5					10					15
Ala	Gly	Asn	Val	Thr	Gly	Asp	Val	Cys	Lys	Glu	Lys	Ile	Cys	Ser
				20					25					30
Cys	Asn	Glu	Ile	Glu	Gly	Asp	Leu	His	Val	Asp	Cys	Glu	Lys	Lys
				35					40					45
Gly	Phe	Thr	Ser	Leu	Gln	Arg	Phe	Thr	Ala	Pro	Thr	Ser	Gln	Phe
				50					55					60
Tyr	His	Leu	Phe	Leu	His	Gly	Asn	Ser	Leu	Thr	Arg	Leu	Phe	Pro
				65					70					75
Asn	Glu	Phe	Ala	Asn	Phe	Tyr	Asn	Ala	Val	Ser	Leu	His	Met	Glu
				80					85					90

P1618P2C2 sequence listing.txt

Asn Asn Gly Leu	His 95	Glu Ile Val Pro	Gly 100	Ala Phe Leu Gly	Leu 105
Gln Leu Val Lys	Arg 110	Leu His Ile Asn	Asn 115	Asn Lys Ile Lys	Ser 120
Phe Arg Lys Gln	Thr 125	Phe Leu Gly Leu	Asp 130	Asp Leu Glu Tyr	Leu 135
Gln Ala Asp Phe	Asn 140	Leu Leu Arg Asp	Ile 145	Asp Pro Gly Ala	Phe 150
Gln Asp Leu Asn	Lys 155	Leu Glu Val Leu	Ile 160	Leu Asn Asp Asn	Leu 165
Ile Ser Thr Leu	Pro 170	Ala Asn Val Phe	Gln 175	Tyr Val Pro Ile	Thr 180
His Leu Asp Leu	Arg 185	Gly Asn Arg Leu	Lys 190	Thr Leu Pro Tyr	Glu 195
Glu Val Leu Glu	Gln 200	Ile Pro Gly Ile	Ala 205	Glu Ile Leu Leu	Glu 210
Asp Asn Pro Trp	Asp 215	Cys Thr Cys Asp	Leu 220	Leu Ser Leu Lys	Glu 225
Trp Leu Glu Asn	Ile 230	Pro Lys Asn Ala	Leu 235	Ile Gly Arg Val	Val 240
Cys Glu Ala Pro	Thr 245	Arg Leu Gln Gly	Lys 250	Asp Leu Asn Glu	Thr 255
Thr Glu Gln Asp	Leu 260	Cys Pro Leu Lys	Asn 265	Arg Val Asp Ser	Ser 270
Leu Pro Ala Pro	Pro 275	Ala Gln Glu Glu	Thr 280	Phe Ala Pro Gly	Pro 285
Leu Pro Thr Pro	Phe 290	Lys Thr Asn Gly	Gln 295	Glu Asp His Ala	Thr 300
Pro Gly Ser Ala	Pro 305	Asn Gly Gly Thr	Lys 310	Ile Pro Gly Asn	Trp 315
Gln Ile Lys Ile	Arg 320	Pro Thr Ala Ala	Ile 325	Ala Thr Gly Ser	Ser 330
Arg Asn Lys Pro	Leu 335	Ala Asn Ser Leu	Pro 340	Cys Pro Gly Gly	Cys 345
Ser Cys Asp His	Ile 350	Pro Gly Ser Gly	Leu 355	Lys Met Asn Cys	Asn 360
Asn Arg Asn Val	Ser 365	Ser Leu Ala Asp	Leu 370	Lys Pro Lys Leu	Ser 375
Asn Val Gln Glu	Leu 380	Phe Leu Arg Asp	Asn 385	Lys Ile His Ser	Ile 390
Arg Lys Ser His	Phe 395	Val Asp Tyr Lys	Asn 400	Leu Ile Leu Leu	Asp 405

P1618P2C2 sequence listing.txt

Leu Gly Asn Asn	Asn Ile Ala Thr Val	Glu Asn Asn Thr Phe	Lys
410		415	420
Asn Leu Leu Asp	Leu Arg Trp Leu Tyr	Met Asp Ser Asn Tyr	Leu
425		430	435
Asp Thr Leu Ser	Arg Glu Lys Phe Ala	Gly Leu Gln Asn Leu	Glu
440		445	450
Tyr Leu Asn Val	Glu Tyr Asn Ala Ile	Gln Leu Ile Leu Pro	Gly
455		460	465
Thr Phe Asn Ala	Met Pro Lys Leu Arg	Ile Leu Ile Leu Asn	Asn
470		475	480
Asn Leu Leu Arg	Ser Leu Pro Val Asp	Val Phe Ala Gly Val	Ser
485		490	495
Leu Ser Lys Leu	Ser Leu His Asn Asn	Tyr Phe Met Tyr Leu	Pro
500		505	510
Val Ala Gly Val	Leu Asp Gln Leu Thr	Ser Ile Ile Gln Ile	Asp
515		520	525
Leu His Gly Asn	Pro Trp Glu Cys Ser	Cys Thr Ile Val Pro	Phe
530		535	540
Lys Gln Trp Ala	Glu Arg Leu Gly Ser	Glu Val Leu Met Ser	Asp
545		550	555
Leu Lys Cys Glu	Thr Pro Val Asn Phe	Phe Arg Lys Asp Phe	Met
560		565	570
Leu Leu Ser Asn	Asp Glu Ile Cys Pro	Gln Leu Tyr Ala Arg	Ile
575		580	585
Ser Pro Thr Leu	Thr Ser His Ser Lys	Asn Ser Thr Gly Leu	Ala
590		595	600
Glu Thr Gly Thr	His Ser Asn Ser Tyr	Leu Asp Thr Ser Arg	Val
605		610	615
Ser Ile Ser Val	Leu Val Pro Gly Leu	Leu Leu Val Phe Val	Thr
620		625	630
Ser Ala Phe Thr	Val Val Gly Met Leu	Val Phe Ile Leu Arg	Asn
635		640	645
Arg Lys Arg Ser	Lys Arg Arg Asp Ala	Asn Ser Ser Ala Ser	Glu
650		655	660
Ile Asn Ser Leu	Gln Thr Val Cys Asp	Ser Ser Tyr Trp His	Asn
665		670	675
Gly Pro Tyr Asn	Ala Asp Gly Ala His	Arg Val Tyr Asp Cys	Gly
680		685	690
Ser His Ser Leu	Ser Asp		
	695		

<210> 92

<211> 22

P1618P2C2 sequence listing.txt

```

<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic Oligonucleotide Probe

<400> 92
gttgatctg ggcaacaata ac 22

<210> 93
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic Oligonucleotide Probe

<400> 93
attgttgtgc aggctgagtt taag 24

<210> 94
<211> 45
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic Oligonucleotide Probe

<400> 94
ggtggctata catggatagc aattacctgg acacgctgtc ccggg 45

<210> 95
<211> 2226
<212> DNA
<213> Homo Sapien

<400> 95
agtcgactgc gtcccctgta cccggcgcca gctgtgttcc tgacccca 50
ataactcagg gctgcaccgg gcctggcagc gctccgcaca catttcctgt 100
cgcggcctaa gggaaactgt tggccgctgg gcccgcgggg ggattcttgg 150
cagttggggg gtccgtcggg agcgaaggcg gaggggaagg gagggggaac 200
cgggttgggg aagccagctg tagagggcgg tgaccgcgct ccagacacag 250
ctctgcgtcc tcgagcggga cagatccaag ttgggagcag ctctgcgtgc 300
ggggcctcag agaatgaggc cggcgttcgc cctgtgcctc ctctggcagg 350
cgctctggcc cgggccgggc ggcggcgaac acccactgc cgaccgtgct 400
ggctgctcgg cctcgggggc ctgctacagc ctgcaccacg ctaccatgaa 450
gcggcaggcg gccgaggagg cctgcacact gcgaggtggg gcgctcagca 500
ccgtgcgtgc gggcgccgag ctgcgcgctg tgctcgcgct cctgcgggca 550
ggcccagggc ccggaggggg ctcaaagac ctgctgttct gggtcgcact 600
ggagcgcagg cgttcccact gcaccctgga gaacgagcct ttgcgggggtt 650

```

P1618P2C2 sequence listing.txt

tctcctggct gtcctccgac cccggcggtc tcgaaagcga cacgctgcag 700  
 tgggtggagg agccccaacg ctctgcacc gcgcggagat gcgcggtact 750  
 ccaggccacc ggtggggctg agcccgagg ctggaaggag atgcgatgcc 800  
 acctgcgcgc caacggctac ctgtgcaagt accagtttga ggtcttgtgt 850  
 cctgcgccgc gccccggggc cgcttctaac ttgagctatc gcgcgccctt 900  
 ccagctgcac agcgccgctc tggacttcag tccacctggg accgaggtga 950  
 gtgcgctctg ccgggggacag ctcccgatct cagttacttg catcgcgga 1000  
 gaaatcggcg ctgcgtggga caaactctcg ggcgatgtgt tgtgtccctg 1050  
 ccccgaggag tacctccgtg ctggcaaatg cgcagagctc cctaactgcc 1100  
 tagacgactt gggaggcttt gcctgcgaat gtgctacggg cttcgagctg 1150  
 gggaaggacg gccgctcttg tgtgaccagt ggggaaggac agccgaccct 1200  
 tggggggacc ggggtgcca ccaggcgccc gccggccact gcaaccagcc 1250  
 ccgtgccga gagaacatgg ccaatcaggg tcgacgagaa gctgggagag 1300  
 acaccacttg tccctgaaca agacaattca gtaacatcta ttcctgagat 1350  
 tcctcgatgg ggatcacaga gcacgatgtc tacccttcaa atgtcccttc 1400  
 aagccgagtc aaaggccact atcaccccat caggagcgt gatttccaag 1450  
 tttaattcta cgacttcctc tgccactcct caggctttcg actcctcctc 1500  
 tgccgtggtc ttcataattg tgagcacagc agtagtagtg ttggtgatct 1550  
 tgaccatgac agtactgggg cttgtcaagc tctgctttca cgaaagcccc 1600  
 tcttcccagc caaggaagga gtctatgggc ccgccgggcc tggagagtga 1650  
 tcctgagccc gctgctttgg gctccagttc tgcacattgc acaaacaatg 1700  
 ggggtgaaagt cggggactgt gatctgcggg acagagcaga ggggtgcctt 1750  
 ctggcggagt cccctcttgg ctctagtgat gcatagggaa acaggggaca 1800  
 tgggcactcc tgtgaacagt ttttcacttt tgatgaaacg gggaaccaag 1850  
 aggaacttac ttgtgtaact gacaatttct gcagaaatcc cccttcctct 1900  
 aaattccctt tactccactg aggagctaaa tcagaactgc acactccttc 1950  
 cctgatgata gaggaagtgg aagtgccttt aggatggtga tactggggga 2000  
 ccgggtagtg ctggggagag atattttctt atgtttattc ggagaatttg 2050  
 gagaagtgat tgaacttttc aagacattgg aaacaaatag aacacaatat 2100  
 aatttacatt aaaaaataat ttctaccaa atggaaagga aatgttctat 2150  
 gttgttcagg ctaggagtat attggttcga aatcccaggg aaaaaataa 2200  
 aaataaaaaa ttaaaggatt gttgat 2226

P1618P2C2 sequence listing.txt

<210> 96  
 <211> 490  
 <212> PRT  
 <213> Homo Sapien

<400> 96

Met	Arg	Pro	Ala	Phe	Ala	Leu	Cys	Leu	Leu	Trp	Gln	Ala	Leu	Trp	1	5	10	15
Pro	Gly	Pro	Gly	Gly	Gly	Glu	His	Pro	Thr	Ala	Asp	Arg	Ala	Gly	20	25	30	
Cys	Ser	Ala	Ser	Gly	Ala	Cys	Tyr	Ser	Leu	His	His	Ala	Thr	Met	35	40	45	
Lys	Arg	Gln	Ala	Ala	Glu	Glu	Ala	Cys	Ile	Leu	Arg	Gly	Gly	Ala	50	55	60	
Leu	Ser	Thr	Val	Arg	Ala	Gly	Ala	Glu	Leu	Arg	Ala	Val	Leu	Ala	65	70	75	
Leu	Leu	Arg	Ala	Gly	Pro	Gly	Pro	Gly	Gly	Gly	Ser	Lys	Asp	Leu	80	85	90	
Leu	Phe	Trp	Val	Ala	Leu	Glu	Arg	Arg	Arg	Ser	His	Cys	Thr	Leu	95	100	105	
Glu	Asn	Glu	Pro	Leu	Arg	Gly	Phe	Ser	Trp	Leu	Ser	Ser	Asp	Pro	110	115	120	
Gly	Gly	Leu	Glu	Ser	Asp	Thr	Leu	Gln	Trp	Val	Glu	Glu	Pro	Gln	125	130	135	
Arg	Ser	Cys	Thr	Ala	Arg	Arg	Cys	Ala	Val	Leu	Gln	Ala	Thr	Gly	140	145	150	
Gly	Val	Glu	Pro	Ala	Gly	Trp	Lys	Glu	Met	Arg	Cys	His	Leu	Arg	155	160	165	
Ala	Asn	Gly	Tyr	Leu	Cys	Lys	Tyr	Gln	Phe	Glu	Val	Leu	Cys	Pro	170	175	180	
Ala	Pro	Arg	Pro	Gly	Ala	Ala	Ser	Asn	Leu	Ser	Tyr	Arg	Ala	Pro	185	190	195	
Phe	Gln	Leu	His	Ser	Ala	Ala	Leu	Asp	Phe	Ser	Pro	Pro	Gly	Thr	200	205	210	
Glu	Val	Ser	Ala	Leu	Cys	Arg	Gly	Gln	Leu	Pro	Ile	Ser	Val	Thr	215	220	225	
Cys	Ile	Ala	Asp	Glu	Ile	Gly	Ala	Arg	Trp	Asp	Lys	Leu	Ser	Gly	230	235	240	
Asp	Val	Leu	Cys	Pro	Cys	Pro	Gly	Arg	Tyr	Leu	Arg	Ala	Gly	Lys	245	250	255	
Cys	Ala	Glu	Leu	Pro	Asn	Cys	Leu	Asp	Asp	Leu	Gly	Gly	Phe	Ala	260	265	270	
Cys	Glu	Cys	Ala	Thr	Gly	Phe	Glu	Leu	Gly	Lys	Asp	Gly	Arg	Ser	275	280	285	

P1618P2C2 sequence listing.txt

Cys	Val	Thr	Ser	Gly	Glu	Gly	Gln	Pro	Thr	Leu	Gly	Gly	Thr	Gly
				290					295					300
Val	Pro	Thr	Arg	Arg	Pro	Pro	Ala	Thr	Ala	Thr	Ser	Pro	Val	Pro
				305					310					315
Gln	Arg	Thr	Trp	Pro	Ile	Arg	Val	Asp	Glu	Lys	Leu	Gly	Glu	Thr
				320					325					330
Pro	Leu	Val	Pro	Glu	Gln	Asp	Asn	Ser	Val	Thr	Ser	Ile	Pro	Glu
				335					340					345
Ile	Pro	Arg	Trp	Gly	Ser	Gln	Ser	Thr	Met	Ser	Thr	Leu	Gln	Met
				350					355					360
Ser	Leu	Gln	Ala	Glu	Ser	Lys	Ala	Thr	Ile	Thr	Pro	Ser	Gly	Ser
				365					370					375
Val	Ile	Ser	Lys	Phe	Asn	Ser	Thr	Thr	Ser	Ser	Ala	Thr	Pro	Gln
				380					385					390
Ala	Phe	Asp	Ser	Ser	Ser	Ala	Val	Val	Phe	Ile	Phe	Val	Ser	Thr
				395					400					405
Ala	Val	Val	Val	Leu	Val	Ile	Leu	Thr	Met	Thr	Val	Leu	Gly	Leu
				410					415					420
Val	Lys	Leu	Cys	Phe	His	Glu	Ser	Pro	Ser	Ser	Gln	Pro	Arg	Lys
				425					430					435
Glu	Ser	Met	Gly	Pro	Pro	Gly	Leu	Glu	Ser	Asp	Pro	Glu	Pro	Ala
				440					445					450
Ala	Leu	Gly	Ser	Ser	Ser	Ala	His	Cys	Thr	Asn	Asn	Gly	Val	Lys
				455					460					465
Val	Gly	Asp	Cys	Asp	Leu	Arg	Asp	Arg	Ala	Glu	Gly	Ala	Leu	Leu
				470					475					480
Ala	Glu	Ser	Pro	Leu	Gly	Ser	Ser	Asp	Ala					
				485					490					

<210> 97  
 <211> 24  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Synthetic Oligonucleotide Probe

<400> 97  
 tggaaggaga tgcgatgcca cctg 24

<210> 98  
 <211> 20  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Synthetic oligonucleotide probe

<400> 98

P1618P2C2 sequence listing.txt

tgaccagtgg ggaaggacag 20

<210> 99

<211> 20

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic Oligonucleotide Probe

<400> 99

acagagcaga ggggtgccttg 20

<210> 100

<211> 24

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic Oligonucleotide Probe

<400> 100

tcagggacaa gtggtgtctc tccc 24

<210> 101

<211> 24

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic Oligonucleotide Probe

<400> 101

tcaggaagg agtgtgcagt tctg 24

<210> 102

<211> 50

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic Oligonucleotide Probe

<400> 102

acagctcccg atctcagta cttgcatcgc ggacgaaatc ggcgctcgct 50

<210> 103

<211> 2026

<212> DNA

<213> Homo Sapien

<400> 103

cggacgcgtg ggattcagca gtggcctgtg gctgccagag cagctcctca 50

ggggaaacta agcgtcgagt cagacggcac cataatcgcc tttaaagtg 100

cctccgccct gccggccgcg tatccccgcg ctacctgggc cgccccgcgg 150

cggtgcgcgc gtgagaggga gcgcgcgggc agccgagcgc cggtgtgagc 200

cagcgtgct gccagtgtga gcggcggtgt gagcgcggtg ggtgcggagg 250

ggcgtgtgtg ccggcgcgcg cgccgtgggg tgcaaaccgc gagcgtctac 300



P1618P2C2 sequence listing.txt

gctgccatga ggggcgcgaa cgcctgggcg ccactctgcc tgctgctggc 350  
 tgccgccacc cagctctcgc ggcagcagtc cccagagaga cctgttttca 400  
 catgtggttg cattcttact ggagagtctg gatttattgg cagtgaaggt 450  
 tttcctggag tgtaccctcc aaatagcaaa tgtacttga aaatcacagt 500  
 tcccgaagga aaagtagtcg ttctcaattt ccgattcata gacctcgaga 550  
 gtgacaacct gtgccgctat gactttgtgg atgtgtacaa tggccatgcc 600  
 aatggccagc gcattggccg cttctgtggc actttccggc ctggagccct 650  
 tgtgtccagt ggcaacaaga tgatggtgca gatgatttct gatgccaaca 700  
 cagctggcaa tggcttcatt gccatgttct ccgctgctga accaaacgaa 750  
 agaggggatc agtattgtgg aggactcctt gacagacctt ccggctcttt 800  
 taaaaccccc aactggccag accgggatta ccctgcagga gtcacttgtg 850  
 tgtggcacat thtagcccca aagaatcagc ttatagaatt aaagtttgag 900  
 aagtttgatg tggagcgaga taactactgc cgatatgatt atgtggctgt 950  
 gtttaatggc ggggaagtca acgatgctag aagaattgga aagtattgtg 1000  
 gtgatagtcc acctgcgcca attgtgtctg agagaaatga acttcttatt 1050  
 cagtttttat cagacttaag tttaactgca gatgggttta ttggtcacta 1100  
 catattcagg ccaaaaaaac tgcctacaac tacagaacag cctgtcacca 1150  
 ccacattccc tgtaaccacg ggtttaaaac ccaccgtggc cttgtgtcaa 1200  
 caaaagtgtg gacggacggg gactctggag ggcaattatt gttcaagtga 1250  
 ctttgtatta gccggcactg ttatcacaa catcactcgc gatgggagtt 1300  
 tgcacgccac agtctcgatc atcaacatct acaaagaggg aaatttggcg 1350  
 attcagcagg cgggcaagaa catgagtgcc aggctgactg tcgtctgcaa 1400  
 gcagtgccct ctcttcagaa gaggtctaaa ttacattatt atgggccaag 1450  
 taggtgaaga tgggcgaggc aaaatcatgc caaacagctt tatcatgatg 1500  
 ttcaagacca agaatcagaa gctcctggat gccttaaaaa ataagcaatg 1550  
 ttaacagtga actgtgtcca tttaagctgt attctgccat tgcctttgaa 1600  
 agatctatgt tctctcagta gaaaaaaaaa tacttataaa attacatatt 1650  
 ctgaaagagg attccgaaag atgggactgg ttgactcttc acatgatgga 1700  
 ggtatgaggc ctccgagata gctgagggaa gttctttgcc tgctgtcaga 1750  
 ggagcagcta tctgattgga aacctgccga cttagtgcgg tgataggaag 1800  
 ctaaaagtgt caagcgttga cagcttggaa gcgtttatatt atacatctct 1850

P1618P2C2 sequence listing.txt

gtaaaaggat attttagaat tgagttgtgt gaagatgtca aaaaaagatt 1900  
 ttagaagtgc aatatttata gtgttatttg tttcaccttc aagcctttgc 1950  
 cctgaggtgt tacaatcttg tcttgcgttt tctaaatcaa tgcttaataa 2000  
 aatattttta aaggaaaaaa aaaaaa 2026

<210> 104  
 <211> 415  
 <212> PRT  
 <213> Homo Sapien

<400> 104  
 Met Arg Gly Ala Asn Ala Trp Ala Pro Leu Cys Leu Leu Leu Ala  
 1 5 10 15  
 Ala Ala Thr Gln Leu Ser Arg Gln Gln Ser Pro Glu Arg Pro Val  
 20 25 30  
 Phe Thr Cys Gly Gly Ile Leu Thr Gly Glu Ser Gly Phe Ile Gly  
 35 40 45  
 Ser Glu Gly Phe Pro Gly Val Tyr Pro Pro Asn Ser Lys Cys Thr  
 50 55 60  
 Trp Lys Ile Thr Val Pro Glu Gly Lys Val Val Val Leu Asn Phe  
 65 70 75  
 Arg Phe Ile Asp Leu Glu Ser Asp Asn Leu Cys Arg Tyr Asp Phe  
 80 85 90  
 Val Asp Val Tyr Asn Gly His Ala Asn Gly Gln Arg Ile Gly Arg  
 95 100 105  
 Phe Cys Gly Thr Phe Arg Pro Gly Ala Leu Val Ser Ser Gly Asn  
 110 115 120  
 Lys Met Met Val Gln Met Ile Ser Asp Ala Asn Thr Ala Gly Asn  
 125 130 135  
 Gly Phe Met Ala Met Phe Ser Ala Ala Glu Pro Asn Glu Arg Gly  
 140 145 150  
 Asp Gln Tyr Cys Gly Gly Leu Leu Asp Arg Pro Ser Gly Ser Phe  
 155 160 165  
 Lys Thr Pro Asn Trp Pro Asp Arg Asp Tyr Pro Ala Gly Val Thr  
 170 175 180  
 Cys Val Trp His Ile Val Ala Pro Lys Asn Gln Leu Ile Glu Leu  
 185 190 195  
 Lys Phe Glu Lys Phe Asp Val Glu Arg Asp Asn Tyr Cys Arg Tyr  
 200 205 210  
 Asp Tyr Val Ala Val Phe Asn Gly Gly Glu Val Asn Asp Ala Arg  
 215 220 225  
 Arg Ile Gly Lys Tyr Cys Gly Asp Ser Pro Pro Ala Pro Ile Val  
 230 235 240  
 Ser Glu Arg Asn Glu Leu Leu Ile Gln Phe Leu Ser Asp Leu Ser

P1618P2C2 sequence listing.txt

245 250 255

Leu Thr Ala Asp Gly Phe Ile Gly His Tyr Ile Phe Arg Pro Lys  
260 265 270

Lys Leu Pro Thr Thr Thr Glu Gln Pro Val Thr Thr Thr Phe Pro  
275 280 285

Val Thr Thr Gly Leu Lys Pro Thr Val Ala Leu Cys Gln Gln Lys  
290 295 300

Cys Arg Arg Thr Gly Thr Leu Glu Gly Asn Tyr Cys Ser Ser Asp  
305 310 315

Phe Val Leu Ala Gly Thr Val Ile Thr Thr Ile Thr Arg Asp Gly  
320 325 330

Ser Leu His Ala Thr Val Ser Ile Ile Asn Ile Tyr Lys Glu Gly  
335 340 345

Asn Leu Ala Ile Gln Gln Ala Gly Lys Asn Met Ser Ala Arg Leu  
350 355 360

Thr Val Val Cys Lys Gln Cys Pro Leu Leu Arg Arg Gly Leu Asn  
365 370 375

Tyr Ile Ile Met Gly Gln Val Gly Glu Asp Gly Arg Gly Lys Ile  
380 385 390

Met Pro Asn Ser Phe Ile Met Met Phe Lys Thr Lys Asn Gln Lys  
395 400 405

Leu Leu Asp Ala Leu Lys Asn Lys Gln Cys  
410 415

<210> 105

<211> 22

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic Oligonucleotide Probe

<400> 105

ccgattcata gacctcgaga gt 22

<210> 106

<211> 22

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic Oligonucleotide Probe

<400> 106

gtcaaggagt cctccacaat ac 22

<210> 107

<211> 45

<212> DNA

<213> Artificial Sequence

<220>

P1618P2C2 sequence listing.txt

<223> Synthetic Oligonucleotide Probe

<400> 107

gtgtacaatg gccatgccaa tggccagcgc attggccgct tctgt 45

<210> 108

<211> 1838

<212> DNA

<213> Homo Sapien

<400> 108

cggacgcgtg ggcggacgcg tgggcggccc acggcgcccc cgggctgggg 50  
cggctcgcttc ttccttctcc gtggcctacg aggggtcccca gcctgggtaa 100  
agatggcccc atggcccccg aagggcctag tcccagctgt gctctggggc 150  
ctcagcctct tctcaacct cccaggacct atctggctcc agccctctcc 200  
acctccccag tcttctcccc cgcctcagcc ccatccgtgt catacctgcc 250  
ggggactggt tgacagcttt aacaagggcc tggagagaac catccgggac 300  
aactttggag gtggaacac tgcctgggag gaagagaatt tgtccaaata 350  
caaagacagt gagaccgcc tggtagaggt gctggagggt gtgtgcagca 400  
agtcagactt cgagtgcac cgcctgctgg agctgagtga ggagctggtg 450  
gagagctggt ggtttcacaa gcagcaggag gccccggacc tcttccagtg 500  
gctgtgctca gattccctga agctctgctg ccccgaggc accttcgggc 550  
cctcctgcct tccctgtcct gggggaacag agaggccctg cgggtggctac 600  
gggcagtgtg aaggagaagg gacacgaggg ggcagcgggc actgtgactg 650  
ccaagccggc tacgggggtg aggcctgtgg ccagtgtggc cttggctact 700  
ttgaggcaga acgcaacgcc agccatctgg tatgttcggc ttgttttggc 750  
ccctgtgccc gatgctcagg acctgaggaa tcaaactgtt tgcaatgcaa 800  
gaagggtggt gccctgcac acctcaagtg tgtagacatt gatgagtgtg 850  
gcacagaggg agccaactgt ggagctgacc aattctgcgt gaacactgag 900  
ggctcctatg agtgccgaga ctgtgccaag gcctgcctag gctgcatggg 950  
ggcagggcca ggtcgctgta agaagtgtag ccctggctat cagcagggtg 1000  
gctccaagtg tctcgatgtg gatgagtgtg agacagaggt gtgtccggga 1050  
gagaacaagc agtgtgaaaa caccgagggc gggtatcgct gcatctgtgc 1100  
cgagggctac aagcagatgg aaggcatctg tgtgaaggag cagatcccag 1150  
agtcagcagg cttcttctca gagatgacag aagacgagtt ggtgggtgctg 1200  
cagcagatgt tctttggcat catcatctgt gactggcca cgctggctgc 1250  
taagggcgac ttggtgttca ccgccatctt cattgggggt gtggcgcca 1300

P1618P2C2 sequence listing.txt

tgactggcta ctggttgtca gagcgagtg accgtgtgct ggagggcttc 1350  
atcaagggca gataatcgcg gccaccacct gtaggacctc ctcccacca 1400  
cgctgcccc agagcttggg ctgccctcct gctggacct caggacagct 1450  
tggtttatatt ttgagagtgg ggtaagcacc cctacctgcc ttacagagca 1500  
gcccaggtac ccaggcccg gcagacaagg cccctgggggt aaaaagtagc 1550  
cctgaaggtg gataccatga gctcttcacc tggcggggac tggcaggctt 1600  
cacaatgtgt gaatttcaaa agtttttcct taatggtggc tgctagagct 1650  
ttggcccctg cttaggatta ggtggtcctc acaggggtgg ggccatcaca 1700  
gctccctcct gccagctgca tgctgccagt tcctgttctg tggtcaccac 1750  
atccccacac ccattgcca cttatttatt catctcagga aataaagaaa 1800  
ggtcttgga agttaaaaaa aaaaaaaaaa aaaaaaaa 1838

<210> 109  
<211> 420  
<212> PRT  
<213> Homo Sapien

<400> 109  
Met Ala Pro Trp Pro Pro Lys Gly Leu Val Pro Ala Val Leu Trp  
1 5 10 15  
Gly Leu Ser Leu Phe Leu Asn Leu Pro Gly Pro Ile Trp Leu Gln  
20 25 30  
Pro Ser Pro Pro Pro Gln Ser Ser Pro Pro Pro Gln Pro His Pro  
35 40 45  
Cys His Thr Cys Arg Gly Leu Val Asp Ser Phe Asn Lys Gly Leu  
50 55 60  
Glu Arg Thr Ile Arg Asp Asn Phe Gly Gly Gly Asn Thr Ala Trp  
65 70 75  
Glu Glu Glu Asn Leu Ser Lys Tyr Lys Asp Ser Glu Thr Arg Leu  
80 85 90  
Val Glu Val Leu Glu Gly Val Cys Ser Lys Ser Asp Phe Glu Cys  
95 100 105  
His Arg Leu Leu Glu Leu Ser Glu Glu Leu Val Glu Ser Trp Trp  
110 115 120  
Phe His Lys Gln Gln Glu Ala Pro Asp Leu Phe Gln Trp Leu Cys  
125 130 135  
Ser Asp Ser Leu Lys Leu Cys Cys Pro Ala Gly Thr Phe Gly Pro  
140 145 150  
Ser Cys Leu Pro Cys Pro Gly Gly Thr Glu Arg Pro Cys Gly Gly  
155 160 165  
Tyr Gly Gln Cys Glu Gly Glu Gly Thr Arg Gly Gly Ser Gly His  
170 175 180

P1618P2C2 sequence listing.txt

Cys Asp Cys Gln	Ala 185	Gly Tyr Gly Gly	Glu 190	Ala Cys Gly Gln	Cys 195
Gly Leu Gly Tyr	Phe 200	Glu Ala Glu Arg	Asn 205	Ala Ser His Leu	Val 210
Cys Ser Ala Cys	Phe 215	Gly Pro Cys Ala	Arg 220	Cys Ser Gly Pro	Glu 225
Glu Ser Asn Cys	Leu 230	Gln Cys Lys Lys	Gly 235	Trp Ala Leu His	His 240
Leu Lys Cys Val	Asp 245	Ile Asp Glu Cys	Gly 250	Thr Glu Gly Ala	Asn 255
Cys Gly Ala Asp	Gln 260	Phe Cys Val Asn	Thr 265	Glu Gly Ser Tyr	Glu 270
Cys Arg Asp Cys	Ala 275	Lys Ala Cys Leu	Gly 280	Cys Met Gly Ala	Gly 285
Pro Gly Arg Cys	Lys 290	Lys Cys Ser Pro	Gly 295	Tyr Gln Gln Val	Gly 300
Ser Lys Cys Leu	Asp 305	Val Asp Glu Cys	Glu 310	Thr Glu Val Cys	Pro 315
Gly Glu Asn Lys	Gln 320	Cys Glu Asn Thr	Glu 325	Gly Gly Tyr Arg	Cys 330
Ile Cys Ala Glu	Gly 335	Tyr Lys Gln Met	Glu 340	Gly Ile Cys Val	Lys 345
Glu Gln Ile Pro	Glu 350	Ser Ala Gly Phe	Phe 355	Ser Glu Met Thr	Glu 360
Asp Glu Leu Val	Val 365	Leu Gln Gln Met	Phe 370	Phe Gly Ile Ile	Ile 375
Cys Ala Leu Ala	Thr 380	Leu Ala Ala Lys	Gly 385	Asp Leu Val Phe	Thr 390
Ala Ile Phe Ile	Gly 395	Ala Val Ala Ala	Met 400	Thr Gly Tyr Trp	Leu 405
Ser Glu Arg Ser	Asp 410	Arg Val Leu Glu	Gly 415	Phe Ile Lys Gly	Arg 420

<210> 110

<211> 50

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic Oligonucleotide Probe

<400> 110

cctggctatc agcaggtggg ctccaagtgt ctcgatgtgg atgagtgtga 50

<210> 111

<211> 22

<212> DNA

P1618P2C2 sequence listing.txt

<213> Artificial Sequence

<220>

<223> Synthetic Oligonucleotide Probe

<400> 111

attctgcgtg aacactgagg gc 22

<210> 112

<211> 22

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic Oligonucleotide Probe

<400> 112

atctgcttgt agccctcggc ac 22

<210> 113

<211> 1616

<212> DNA

<213> Homo Sapien

<220>

<221> unsure

<222> 1461

<223> unknown base

<400> 113

tgagaccctc ctgcagcctt ctcaagggac agccccactc tgcctcttgc 50  
 tcctccaggg cagcaccatg cagccccctgt ggctctgctg ggcactctgg 100  
 gtgttgcccc tggccagccc cggggccgcc ctgaccgggg agcagctcct 150  
 gggcagcctg ctgcggcagc tgcagctcaa agagggtgcc accctggaca 200  
 gggccgacat ggaggagctg gtcaccccca cccacgtgag ggcccagtac 250  
 gtggccctgc tgcagcgag ccacggggac cgctcccgcg gaaagagggt 300  
 cagccagagc ttccgagagg tggccggcag gttcctggcg ttggaggcca 350  
 gcacacacct gctggtgttc ggcatggagc agcggctgcc gcccaacagc 400  
 gagctggtgc aggccgtgct gcggctcttc caggagccgg tccccaaggc 450  
 cgcgctgcac aggcacgggc ggctgtcccc gcgcagcgcc cgggcccggg 500  
 tgaccgtcga gtggctgcgc gtccgcgacg acgggtccaa ccgcacctcc 550  
 ctcacgact ccaggctggt gtccgtccac gagagcggct ggaaggcctt 600  
 cgacgtgacc gaggccgtga acttctggca gcagctgagc cggccccggc 650  
 agccgctgct gctacaggtg tcggtgcaga gggagcatct gggcccgtg 700  
 gcgtccggcg cccacaagct ggtccgcttt gcctcgagg gggcgccagc 750  
 cgggcttggg gagccccagc tggagctgca caccctggac cttggggact 800  
 atggagctca gggcgactgt gaccctgaag caccaatgac cgagggcacc 850

P1618P2C2 sequence listing.txt

cgctgctgcc gccaggagat gtacattgac ctgcagggga tgaagtgggc 900  
 cgagaactgg gtgctggagc ccccgggctt cctggcttat gagtgtgtgg 950  
 gcacctgccg gcagcccccg gagggccttg cttcaagtg gccgtttctg 1000  
 gggcctcgac agtgcacgc ctcggagact gactcgctgc ccatgatcgt 1050  
 cagcatcaag gagggaggca ggaccaggcc ccaggtggtc agcctgcca 1100  
 acatgagggg gcagaagtgc agctgtgcct cggatgggtg gctcgtgcca 1150  
 aggaggctcc agccataggc gcctagtgtg gccatcgagg gacttgactt 1200  
 gtgtgtgttt ctgaagtgtt cgagggtacc aggagagctg gcgatgactg 1250  
 aactgctgat ggacaaatgc tctgtgctct ctagtgagcc ctgaatttgc 1300  
 ttcctctgac aagttacctc acctaatttt tgcttctcag gaatgagaat 1350  
 ctttggccac tggagagccc ttgctcagtt ttctctattc ttattattca 1400  
 ctgcactata ttctaagcac ttacatgtgg agatactgta acctgagggc 1450  
 agaaagccca ntgtgtcatt gtttacttgt cctgtcactg gatctgggct 1500  
 aaagtcctcc accaccactc tggacctaa agctgggggt aagtgtgggt 1550  
 tgtgcatccc caatccagat aataaagact ttgtaaaaca tgaataaaac 1600  
 acattttatt ctaaaa 1616

<210> 114  
 <211> 366  
 <212> PRT  
 <213> Homo Sapien

<400> 114  
 Met Gln Pro Leu Trp Leu Cys Trp Ala Leu Trp Val Leu Pro Leu  
 1 5 10 15  
 Ala Ser Pro Gly Ala Ala Leu Thr Gly Glu Gln Leu Leu Gly Ser  
 20 25 30  
 Leu Leu Arg Gln Leu Gln Leu Lys Glu Val Pro Thr Leu Asp Arg  
 35 40 45  
 Ala Asp Met Glu Glu Leu Val Ile Pro Thr His Val Arg Ala Gln  
 50 55 60  
 Tyr Val Ala Leu Leu Gln Arg Ser His Gly Asp Arg Ser Arg Gly  
 65 70 75  
 Lys Arg Phe Ser Gln Ser Phe Arg Glu Val Ala Gly Arg Phe Leu  
 80 85 90  
 Ala Leu Glu Ala Ser Thr His Leu Leu Val Phe Gly Met Glu Gln  
 95 100 105  
 Arg Leu Pro Pro Asn Ser Glu Leu Val Gln Ala Val Leu Arg Leu  
 110 115 120



P1618P2C2 sequence listing.txt

Phe	Gln	Glu	Pro	Val	Pro	Lys	Ala	Ala	Leu	His	Arg	His	Gly	Arg	
				125					130					135	
Leu	Ser	Pro	Arg	Ser	Ala	Arg	Ala	Arg	Val	Thr	Val	Glu	Trp	Leu	
				140					145					150	
Arg	Val	Arg	Asp	Asp	Gly	Ser	Asn	Arg	Thr	Ser	Leu	Ile	Asp	Ser	
				155					160					165	
Arg	Leu	Val	Ser	Val	His	Glu	Ser	Gly	Trp	Lys	Ala	Phe	Asp	Val	
				170					175					180	
Thr	Glu	Ala	Val	Asn	Phe	Trp	Gln	Gln	Leu	Ser	Arg	Pro	Arg	Gln	
				185					190					195	
Pro	Leu	Leu	Leu	Gln	Val	Ser	Val	Gln	Arg	Glu	His	Leu	Gly	Pro	
				200					205					210	
Leu	Ala	Ser	Gly	Ala	His	Lys	Leu	Val	Arg	Phe	Ala	Ser	Gln	Gly	
				215					220					225	
Ala	Pro	Ala	Gly	Leu	Gly	Glu	Pro	Gln	Leu	Glu	Leu	His	Thr	Leu	
				230					235					240	
Asp	Leu	Gly	Asp	Tyr	Gly	Ala	Gln	Gly	Asp	Cys	Asp	Pro	Glu	Ala	
				245					250					255	
Pro	Met	Thr	Glu	Gly	Thr	Arg	Cys	Cys	Arg	Gln	Glu	Met	Tyr	Ile	
				260					265					270	
Asp	Leu	Gln	Gly	Met	Lys	Trp	Ala	Glu	Asn	Trp	Val	Leu	Glu	Pro	
				275					280					285	
Pro	Gly	Phe	Leu	Ala	Tyr	Glu	Cys	Val	Gly	Thr	Cys	Arg	Gln	Pro	
				290					295					300	
Pro	Glu	Ala	Leu	Ala	Phe	Lys	Trp	Pro	Phe	Leu	Gly	Pro	Arg	Gln	
				305					310					315	
Cys	Ile	Ala	Ser	Glu	Thr	Asp	Ser	Leu	Pro	Met	Ile	Val	Ser	Ile	
				320					325					330	
Lys	Glu	Gly	Gly	Arg	Thr	Arg	Pro	Gln	Val	Val	Ser	Leu	Pro	Asn	
				335					340					345	
Met	Arg	Val	Gln	Lys	Cys	Ser	Cys	Ala	Ser	Asp	Gly	Ala	Leu	Val	
				350					355					360	

Pro Arg Arg Leu Gln Pro  
365

<210> 115

<211> 21

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic oligonucleotide Probe

<400> 115

aggactgccca taacttgccct g 21

<210> 116

P1618P2C2 sequence listing.txt

<211> 22  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Synthetic Oligonucleotide Probe

<400> 116  
 ataggagttg aagcagcgct gc 22

<210> 117  
 <211> 45  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Synthetic Oligonucleotide Probe

<400> 117  
 tgtgtggaca tagacgagtg ccgctaccgc tactgccagc accgc 45

<210> 118  
 <211> 1857  
 <212> DNA  
 <213> Homo Sapien

<400> 118  
 gtctgttccc aggagtcctt cggcggctgt tgtgtcagtg gcctgatcgc 50  
 gatggggaca aaggcgcaag tcgagaggaa actgttgtgc ctcttcatat 100  
 tggcgatcct gttgtgctcc ctggcattgg gcagtgttac agtgcactct 150  
 tctgaacctg aagtcagaat tcctgagaat aatcctgtga agttgtcctg 200  
 tgcctactcg ggcttttctt ctccccgtgt ggagtggaag tttgaccaag 250  
 gagacaccac cagactcggt tgctataata acaagatcac agcttcctat 300  
 gaggaccggg tgaccttctt gccaactggg atcaccttca agtccgtgac 350  
 acgggaagac actgggacat acacttgat ggtctctgag gaaggcggca 400  
 acagctatgg ggaggtcaag gtcaagctca tcgtgcttgt gcctccatcc 450  
 aagcctacag ttaacatccc ctctctgcc accattggga accgggcagt 500  
 gctgacatgc tcagaacaag atgggttcccc accttctgaa tacacctggg 550  
 tcaaagatgg gatagtgatg cctacgaatc ccaaaagcac ccgtgccttc 600  
 agcaactctt cctatgtcct gaatcccaca acaggagagc tggctcttga 650  
 tcccctgtca gcctctgata ctggagaata cagctgtgag gcacggaatg 700  
 ggtatgggac acccatgact tcaaagtctg tgcgcatgga agctgtggag 750  
 cggaatgtgg gggatcatcg ggcagccgtc cttgtaaccc tgattctcct 800  
 gggaatcttg gtttttggca tctggtttgc ctatagccga ggccactttg 850  
 acagaacaaa gaaagggact tcgagtaaga aggtgattta cagccagcct 900

P1618P2C2 sequence listing.txt

agtgcccgaa gtgaaggaga attcaaacag acctcgatcat tcctgggtgtg 950  
 agcctgggtcg gctcaccgcc tatcatctgc atttgcctta ctcagggtgct 1000  
 accggactct ggccccctgat gtctgtagtt tcacaggatg ccttatttgt 1050  
 cttctacacc ccacagggcc ccctacttct tcggatgtgt ttttaataat 1100  
 gtcagctatg tgccccatcc tccttcatgc cctccctccc tttcctacca 1150  
 ctgctgagtg gcctggaact tgtttaaagt gtttattccc catttctttg 1200  
 agggatcagg aaggaatcct ggggatgcca ttgacttccc ttctaagtag 1250  
 acagcaaaaa tggcgggggt cgcaggaatc tgcactcaac tgcccacctg 1300  
 gctggcaggg atctttgaat aggtatcttg agcttgggtc tgggctcttt 1350  
 ccttgtgtac tgacgaccag ggccagctgt tctagagcgg gaattagagg 1400  
 ctagagcggc tgaaatgggt gtttggtgat gacactgggg tccttccatc 1450  
 tctggggccc actctcttct gtcttcccat gggagtgcc actgggatcc 1500  
 ctctgccctg tcctcctgaa tacaagctga ctgacattga ctgtgtctgt 1550  
 ggaaaatggg agctcttgtt gtggagagca tagtaaattt tcagagaact 1600  
 tgaagccaaa aggatttaaa accgctgctc taaagaaaag aaaactggag 1650  
 gctgggcgca gtggctcacg cctgtaatcc cagaggctga ggcaggcggg 1700  
 tcacctgagg tcgggagttc gggatcagcc tgaccaacat ggagaaaccc 1750  
 tactggaaat acaaagttag ccaggcatgg tgggtgatgc ctgtagtccc 1800  
 agctgctcag gagcctggca acaagagcaa aactccagct caaaaaaaaaa 1850  
 aaaaaaa 1857

<210> 119  
 <211> 299  
 <212> PRT  
 <213> Homo Sapien

<400> 119  
 Met Gly Thr Lys Ala Gln Val Glu Arg Lys Leu Leu Cys Leu Phe  
 1 5 10 15  
 Ile Leu Ala Ile Leu Leu Cys Ser Leu Ala Leu Gly Ser Val Thr  
 20 25 30  
 Val His Ser Ser Glu Pro Glu Val Arg Ile Pro Glu Asn Asn Pro  
 35 40 45  
 Val Lys Leu Ser Cys Ala Tyr Ser Gly Phe Ser Ser Pro Arg Val  
 50 55 60  
 Glu Trp Lys Phe Asp Gln Gly Asp Thr Thr Arg Leu Val Cys Tyr  
 65 70 75  
 Asn Asn Lys Ile Thr Ala Ser Tyr Glu Asp Arg Val Thr Phe Leu  
 80 85 90

P1618P2C2 sequence listing.txt

```

Pro Thr Gly Ile Thr Phe Lys Ser Val Thr Arg Glu Asp Thr Gly
          95          100          105
Thr Tyr Thr Cys Met Val Ser Glu Glu Gly Gly Asn Ser Tyr Gly
          110          115          120
Glu Val Lys Val Lys Leu Ile Val Leu Val Pro Pro Ser Lys Pro
          125          130          135
Thr Val Asn Ile Pro Ser Ser Ala Thr Ile Gly Asn Arg Ala Val
          140          145          150
Leu Thr Cys Ser Glu Gln Asp Gly Ser Pro Pro Ser Glu Tyr Thr
          155          160          165
Trp Phe Lys Asp Gly Ile Val Met Pro Thr Asn Pro Lys Ser Thr
          170          175          180
Arg Ala Phe Ser Asn Ser Ser Tyr Val Leu Asn Pro Thr Thr Gly
          185          190          195
Glu Leu Val Phe Asp Pro Leu Ser Ala Ser Asp Thr Gly Glu Tyr
          200          205          210
Ser Cys Glu Ala Arg Asn Gly Tyr Gly Thr Pro Met Thr Ser Asn
          215          220          225
Ala Val Arg Met Glu Ala Val Glu Arg Asn Val Gly Val Ile Val
          230          235          240
Ala Ala Val Leu Val Thr Leu Ile Leu Leu Gly Ile Leu Val Phe
          245          250          255
Gly Ile Trp Phe Ala Tyr Ser Arg Gly His Phe Asp Arg Thr Lys
          260          265          270
Lys Gly Thr Ser Ser Lys Lys Val Ile Tyr Ser Gln Pro Ser Ala
          275          280          285
Arg Ser Glu Gly Glu Phe Lys Gln Thr Ser Ser Phe Leu Val
          290          295

```

<210> 120  
 <211> 24  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Synthetic oligonucleotide Probe

<400> 120  
 tcgcggagct gtgttctgtt tccc 24

<210> 121  
 <211> 50  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Synthetic oligonucleotide Probe

<400> 121

P1618P2C2 sequence listing.txt

tgatcgcgat ggggacaaag gcgcaagctc gagaggaaac tgtgtgcct 50

<210> 122

<211> 20

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic Oligonucleotide Probe

<400> 122

acacctggtt caaagatggg 20

<210> 123

<211> 24

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic Oligonucleotide Probe

<400> 123

taggaagagt tgctgaaggc acgg 24

<210> 124

<211> 20

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic Oligonucleotide Probe

<400> 124

ttgccttact caggtgctac 20

<210> 125

<211> 20

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic Oligonucleotide Probe

<400> 125

actcagcagt ggtaggaaag 20

<210> 126

<211> 1210

<212> DNA

<213> Homo Sapien

<400> 126

cagcgcgtgg ccggcgccgc tgtggggaca gcatgagcgg cggttggtatg 50

gcgcaggttg gagcgtggcg aacaggggct ctgggcctgg cgctgctgct 100

gctgctcggc ctcggactag gcctggaggc cgccgcgagc ccgctttcca 150

ccccgacctc tgcccaggcc gcaggcccca gctcaggctc gtgcccaccc 200

accaagtccc agtgccgcac cagtggctta tgcgtgcccc tcacctggcg 250

ctgcgacagg gacttggact gcagcgatgg cagcgatgag gaggagtgca 300

P1618P2C2 sequence listing.txt

ggattgagcc atgtaccag aaagggcaat gccaccgcc ccctggcctc 350  
 ccctgcccct gcaccggcgt cagtgactgc tctgggggaa ctgacaagaa 400  
 actgcgcaac tgcagccgcc tggcctgcct agcaggcgag ctccgttgca 450  
 cgctgagcga tgactgcatt ccactcacgt ggcgctgcga cggccacca 500  
 gactgtcccg actccagcga cgagctcggc tgtggaacca atgagatcct 550  
 cccggaaggg gatgccacaa ccatggggcc ccctgtgacc ctggagagtg 600  
 tcacctctct caggaatgcc acaaccatgg ggccccctgt gaccctggag 650  
 agtgtcccct ctgtcgggaa tgccacatcc tcctctgccg gagaccagtc 700  
 tggaagccca actgcctatg gggttattgc agctgctgcg gtgctcagt 750  
 caagcctggt caccgccacc ctctccttt tgcctggct ccgagcccag 800  
 gagcgctcc gccactggg gttactggtg gccatgaagg agtccctgct 850  
 gctgtcagaa cagaagacct cgctgccctg aggacaagca cttgccacca 900  
 ccgtcactca gccctgggcg tagccggaca ggaggagagc agtgatgcg 950  
 atgggtaccc gggcacacca gccctcagag acctgagttc ttctggccac 1000  
 gtggaacctc gaacccgagc tcctgcagaa gtggccctgg agattgaggg 1050  
 tccctggaca ctccctatgg agatccgggg agctaggatg gggaaacctgc 1100  
 cacagccaga actgaggggc tggccccagg cagctcccag ggggtagaac 1150  
 ggccctgtgc ttaagacact ccctgctgcc ccgtctgagg gtggcgatta 1200  
 aagttgcttc 1210

<210> 127  
 <211> 282  
 <212> PRT  
 <213> Homo Sapien

<400> 127  
 Met Ser Gly Gly Trp Met Ala Gln Val Gly Ala Trp Arg Thr Gly  
 1 5 10 15  
 Ala Leu Gly Leu Ala Leu Leu Leu Leu Gly Leu Gly Leu Gly  
 20 25 30  
 Leu Glu Ala Ala Ala Ser Pro Leu Ser Thr Pro Thr Ser Ala Gln  
 35 40 45  
 Ala Ala Gly Pro Ser Ser Gly Ser Cys Pro Pro Thr Lys Phe Gln  
 50 55 60  
 Cys Arg Thr Ser Gly Leu Cys Val Pro Leu Thr Trp Arg Cys Asp  
 65 70 75  
 Arg Asp Leu Asp Cys Ser Asp Gly Ser Asp Glu Glu Glu Cys Arg  
 80 85 90

P1618P2C2 sequence listing.txt

Ile	Glu	Pro	Cys	Thr	Gln	Lys	Gly	Gln	Cys	Pro	Pro	Pro	Pro	Gly
				95					100					105
Leu	Pro	Cys	Pro	Cys	Thr	Gly	Val	Ser	Asp	Cys	Ser	Gly	Gly	Thr
				110					115					120
Asp	Lys	Lys	Leu	Arg	Asn	Cys	Ser	Arg	Leu	Ala	Cys	Leu	Ala	Gly
				125					130					135
Glu	Leu	Arg	Cys	Thr	Leu	Ser	Asp	Asp	Cys	Ile	Pro	Leu	Thr	Trp
				140					145					150
Arg	Cys	Asp	Gly	His	Pro	Asp	Cys	Pro	Asp	Ser	Ser	Asp	Glu	Leu
				155					160					165
Gly	Cys	Gly	Thr	Asn	Glu	Ile	Leu	Pro	Glu	Gly	Asp	Ala	Thr	Thr
				170					175					180
Met	Gly	Pro	Pro	Val	Thr	Leu	Glu	Ser	Val	Thr	Ser	Leu	Arg	Asn
				185					190					195
Ala	Thr	Thr	Met	Gly	Pro	Pro	Val	Thr	Leu	Glu	Ser	Val	Pro	Ser
				200					205					210
Val	Gly	Asn	Ala	Thr	Ser	Ser	Ser	Ala	Gly	Asp	Gln	Ser	Gly	Ser
				215					220					225
Pro	Thr	Ala	Tyr	Gly	Val	Ile	Ala	Ala	Ala	Ala	Val	Leu	Ser	Ala
				230					235					240
Ser	Leu	Val	Thr	Ala	Thr	Leu	Leu	Leu	Leu	Ser	Trp	Leu	Arg	Ala
				245					250					255
Gln	Glu	Arg	Leu	Arg	Pro	Leu	Gly	Leu	Leu	Val	Ala	Met	Lys	Glu
				260					265					270
Ser	Leu	Leu	Leu	Ser	Glu	Gln	Lys	Thr	Ser	Leu	Pro			
				275					280					

<210> 128

<211> 24

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic Oligonucleotide Probe

<400> 128

aagttccagt gccgcaccag tggc 24

<210> 129

<211> 24

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic Oligonucleotide Probe

<400> 129

ttggttccac agccgagctc gtcg 24

<210> 130

<211> 50

P1618P2C2 sequence listing.txt

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic Oligonucleotide Probe

<400> 130

gaggaggagt gcaggattga gccatgtacc cagaaagggc aatgcccacc 50

<210> 131

<211> 1843

<212> DNA

<213> Homo Sapien

<220>

<221> unsure

<222> 1837

<223> unknown base

<400> 131

cccacgcgtc cggtctcgct cgctcgcgca gcggcggcag cagaggtcgc 50

gcacagatgc gggtttagact ggcgggggga ggaggcggag gagggaagga 100

agctgcatgc atgagaccca cagactcttg caagctggat gccctctgtg 150

gatgaaagat gtatcatgga atgaaccgca gcaatggaga tggatttcta 200

gagcagcagc agcagcagca gcaacctcag tccccccaga gactcttggc 250

cgtgatcctg tggtttcagc tggcgcgtgt cttcggccct gcacagctca 300

cgggcggggt cgatgacctt caagtgtgtg ctgaccccg gattccccgag 350

aatggcttca ggacccccag cggagggggt ttctttgaag gctctgtagc 400

ccgatttcac tgccaagacg gattcaagct gaaggcgct acaaagagac 450

tgtgtttgaa gcattttaat ggaaccctag gctggatccc aagtataat 500

tccatctgtg tgcaagaaga ttgccgtatc cctcaaatcg aagatgctga 550

gattcataac aagacatata gacatggaga gaagctaata atcacttgtc 600

atgaaggatt caagatccgg taccgccgacc tacacaatat ggtttcatta 650

tgtcgcgatg atggaacgtg gaataatctg cccatctgtc aaggctgcct 700

gagacctcta gcctcttcta atggctatgt aaacatctct gagctccaga 750

cctccttccc ggtggggact gtgatctcct atcgctgctt tcccggattt 800

aaacttgatg ggtctgcgta tcttgagtgc ttacaaaacc ttatctggtc 850

gtccagccca ccccggtgcc ttgctctgga agcccaagtc tgtccactac 900

ctccaatggt gagtcacgga gatttcgtct gccaccgcg gccttgtgag 950

cgctacaacc acggaactgt ggtggagttt tactgcatc ctggctacag 1000

cctcaccagc gactacaagt acatcacctg ccagtatgga gagtggtttc 1050

cttcttatca agtctactgc atcaaatcag agcaaactg gccagcacc 1100



P1618P2C2 sequence listing.txt

catgagaccc tcctgaccac gtggaagatt gtggcgttca cggcaaccag 1150  
 tgtgctgctg gtgctgctgc tcgtcatcct ggccaggatg ttccagacca 1200  
 agttcaaggc ccactttccc cccagggggc ctccccggag ttccagcagt 1250  
 gaccctgact ttgtggtggt agacggcgtg cccgtcatgc tcccgtccta 1300  
 tgacgaagct gtgagtggcg gcttgagtgc cttaggcccc gggtagatgg 1350  
 cctctgtggg ccagggtgct cccttaccg tggacgacca gagcccccca 1400  
 gcataccccg gctcagggga cacggacaca ggcccagggg agtcagaaac 1450  
 ctgtgacagc gtctcaggct cttctgagct gtcctaaagt ctgtattcac 1500  
 ctcccagggtg ccaagagagc acccaccctg cttcggacaa ccctgacata 1550  
 attgccagca cggcagagga ggtggcatcc accagcccag gcatccatca 1600  
 tgcccactgg gtgttgttcc taagaaactg attgattaaa aaatttccca 1650  
 aagtgtcctg aagtgtctct tcaaatacat gttgatctgt ggagttgatt 1700  
 cctttccttc tcttggtttt agacaaatgt aaacaaagct ctgacacctta 1750  
 aaattgctat gctgatagag tggtagaggc tggaagcttg atcaagtcct 1800  
 gtttcttctt gacacagact gattaataat taaaagnaaa aaa 1843

<210> 132

<211> 490

<212> PRT

<213> Homo Sapien

<400> 132

Met	Tyr	His	Gly	Met	Asn	Pro	Ser	Asn	Gly	Asp	Gly	Phe	Leu	Glu
1				5					10					15
Gln	Gln	Gln	Gln	Gln	Gln	Gln	Pro	Gln	Ser	Pro	Gln	Arg	Leu	Leu
				20					25					30
Ala	Val	Ile	Leu	Trp	Phe	Gln	Leu	Ala	Leu	Cys	Phe	Gly	Pro	Ala
				35					40					45
Gln	Leu	Thr	Gly	Gly	Phe	Asp	Asp	Leu	Gln	Val	Cys	Ala	Asp	Pro
				50					55					60
Gly	Ile	Pro	Glu	Asn	Gly	Phe	Arg	Thr	Pro	Ser	Gly	Gly	Val	Phe
				65					70					75
Phe	Glu	Gly	Ser	Val	Ala	Arg	Phe	His	Cys	Gln	Asp	Gly	Phe	Lys
				80					85					90
Leu	Lys	Gly	Ala	Thr	Lys	Arg	Leu	Cys	Leu	Lys	His	Phe	Asn	Gly
				95					100					105
Thr	Leu	Gly	Trp	Ile	Pro	Ser	Asp	Asn	Ser	Ile	Cys	Val	Gln	Glu
				110					115					120
Asp	Cys	Arg	Ile	Pro	Gln	Ile	Glu	Asp	Ala	Glu	Ile	His	Asn	Lys
				125					130					135

P1618P2C2 sequence listing.txt

Thr Tyr Arg His	Gly 140	Glu Lys Leu Ile	Ile 145	Thr Cys His Glu	Gly 150
Phe Lys Ile Arg	Tyr 155	Pro Asp Leu His	Asn 160	Met Val Ser Leu	Cys 165
Arg Asp Asp Gly	Thr 170	Trp Asn Asn Leu	Pro 175	Ile Cys Gln Gly	Cys 180
Leu Arg Pro Leu	Ala 185	Ser Ser Asn Gly	Tyr 190	Val Asn Ile Ser	Glu 195
Leu Gln Thr Ser	Phe 200	Pro Val Gly Thr	Val 205	Ile Ser Tyr Arg	Cys 210
Phe Pro Gly Phe	Lys 215	Leu Asp Gly Ser	Ala 220	Tyr Leu Glu Cys	Leu 225
Gln Asn Leu Ile	Trp 230	Ser Ser Ser Pro	Pro 235	Arg Cys Leu Ala	Leu 240
Glu Ala Gln Val	Cys 245	Pro Leu Pro Pro	Met 250	Val Ser His Gly	Asp 255
Phe Val Cys His	Pro 260	Arg Pro Cys Glu	Arg 265	Tyr Asn His Gly	Thr 270
Val Val Glu Phe	Tyr 275	Cys Asp Pro Gly	Tyr 280	Ser Leu Thr Ser	Asp 285
Tyr Lys Tyr Ile	Thr 290	Cys Gln Tyr Gly	Glu 295	Trp Phe Pro Ser	Tyr 300
Gln Val Tyr Cys	Ile 305	Lys Ser Glu Gln	Thr 310	Trp Pro Ser Thr	His 315
Glu Thr Leu Leu	Thr 320	Thr Trp Lys Ile	Val 325	Ala Phe Thr Ala	Thr 330
Ser Val Leu Leu	Val 335	Leu Leu Leu Val	Ile 340	Leu Ala Arg Met	Phe 345
Gln Thr Lys Phe	Lys 350	Ala His Phe Pro	Pro 355	Arg Gly Pro Pro	Arg 360
Ser Ser Ser Ser	Asp 365	Pro Asp Phe Val	Val 370	Val Asp Gly Val	Pro 375
Val Met Leu Pro	Ser 380	Tyr Asp Glu Ala	Val 385	Ser Gly Gly Leu	Ser 390
Ala Leu Gly Pro	Gly 395	Tyr Met Ala Ser	Val 400	Gly Gln Gly Cys	Pro 405
Leu Pro Val Asp	Asp 410	Gln Ser Pro Pro	Ala 415	Tyr Pro Gly Ser	Gly 420
Asp Thr Asp Thr	Gly 425	Pro Gly Glu Ser	Glu 430	Thr Cys Asp Ser	Val 435
Ser Gly Ser Ser	Glu 440	Leu Leu Gln Ser	Leu 445	Tyr Ser Pro Pro	Arg 450

P1618P2C2 sequence listing.txt

Cys Gln Glu Ser Thr His Pro Ala Ser Asp Asn Pro Asp Ile Ile  
455 460 465

Ala Ser Thr Ala Glu Glu Val Ala Ser Thr Ser Pro Gly Ile His  
470 475 480

His Ala His Trp Val Leu Phe Leu Arg Asn  
485 490

<210> 133

<211> 23

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic Oligonucleotide Probe

<400> 133

atctcctatc gctgctttcc cgg 23

<210> 134

<211> 23

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic Oligonucleotide Probe

<400> 134

agccaggatc gcagtaaaac tcc 23

<210> 135

<211> 50

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic Oligonucleotide Probe

<400> 135

atttaaactt gatgggtctg cgtatcttga gtgcttaca aaccttatct 50

<210> 136

<211> 1815

<212> DNA

<213> Homo Sapien

<400> 136

cccacgcgtc cgctccgcgc cctccccccc gcctcccgtg cgggccgtcg 50

gtggcctaga gatgctgctg ccgcgggttg agttgtcgcg cagcctctg 100

cccgccagcc cgctccaccg ccgtagcgcc cgagtgtcgg ggggcgcacc 150

cgagtgcggc catgaggccg ggaaccgcgc tacaggccgt gctgctggcc 200

gtgctgctgg tggggctgcg ggccgcgacg ggctgcctgc tgagtgcctc 250

ggatttgac ctcagaggag ggcagccagt ctgccgggga gggacacaga 300

ggccttgta taaagtcatt tacttccatg atacttctcg aagactgaac 350

P1618P2C2 sequence listing.txt

```

tttgaggaag ccaaagaagc ctgcaggagg gatggaggcc agctagtcag 400
catcgagtct gaagatgaac agaaactgat agaaaagttc attgaaaacc 450
tcttgccatc tgatggtgac ttctggattg ggctcaggag gcgtgaggag 500
aaacaaagca atagcacagc ctgccaggac ctttatgctt ggactgatgg 550
cagcatatca caatttagga actggtatgt ggatgagccg tcctgcggca 600
gcgagggtctg cgtggtcatg taccatcagc catcggcacc cgctggcatc 650
ggaggccccct acatgttcca gtggaatgat gaccggtgca acatgaagaa 700
caatttcatt tgcaaataatt ctgatgagaa accagcagtt ctttctagag 750
aagctgaagg tgaggaaaca gagctgacaa cacctgtact tccagaagaa 800
acacaggaag aagatgccaa aaaaacattt aaagaaagta gagaagctgc 850
cttgaatctg gcctacatcc taatccccag cattccccctt ctctctctcc 900
ttgtgggtcac cacagttgta tgttgggttt ggatctgtag aaaaagaaaa 950
cgggagcagc cagaccctag cacaagaag caacacacca tctggccctc 1000
tcctcaccag ggaaacagcc cggacctaga ggtctacaat gtcataagaa 1050
aacaaagcga agctgactta gctgagaccc ggccagacct gaagaatatt 1100
tcattccgag tgtgttcggg agaagccact cccgatgaca tgtcttgtga 1150
ctatgacaac atggctgtga acccatcaga aagtgggttt gtgactctgg 1200
tgagcgtgga gagtggattt gtgaccaatg acatttatga gttctcccca 1250
gaccaaattg ggaggagtaa ggagtctgga tgggtggaaa atgaaatata 1300
tggttattag gacatataaa aaactgaaac tgacaacaat ggaaaagaaa 1350
tgataagcaa aatcctctta ttttctataa ggaaaataca cagaaggtct 1400
atgaacaagc ttagatcagg tcctgtggat gagcatgtgg tccccacgac 1450
ctcctgttgg acccccacgt tttggctgta tcctttatcc cagccagtca 1500
tccagctcga ccttatgaga aggtaccttg ccaggtctg gcacatagta 1550
gagtctcaat aaatgtcact tggttggtg tatctaactt ttaagggaca 1600
gagctttacc tggcagtgat aaagatgggc tgtggagctt ggaaaaccac 1650
ctctgttttc cttgctctat acagcagcac atattatcat acagacagaa 1700
aatccagaat cttttcaaag cccacatatg gtagcacagg ttggcctgtg 1750
catcggcaat tctcatatct gtttttttca aagaataaaa tcaaataaag 1800
agcaggaaaa aaaaa 1815

```

<210> 137  
 <211> 382  
 <212> PRT

P1618P2C2 sequence listing.txt

<213> Homo Sapien

<400> 137

Met	Arg	Pro	Gly	Thr	Ala	Leu	Gln	Ala	Val	Leu	Leu	Ala	Val	Leu	1	5	10	15
Leu	Val	Gly	Leu	Arg	Ala	Ala	Thr	Gly	Arg	Leu	Leu	Ser	Ala	Ser	20	25	30	
Asp	Leu	Asp	Leu	Arg	Gly	Gly	Gln	Pro	Val	Cys	Arg	Gly	Gly	Thr	35	40	45	
Gln	Arg	Pro	Cys	Tyr	Lys	Val	Ile	Tyr	Phe	His	Asp	Thr	Ser	Arg	50	55	60	
Arg	Leu	Asn	Phe	Glu	Glu	Ala	Lys	Glu	Ala	Cys	Arg	Arg	Asp	Gly	65	70	75	
Gly	Gln	Leu	Val	Ser	Ile	Glu	Ser	Glu	Asp	Glu	Gln	Lys	Leu	Ile	80	85	90	
Glu	Lys	Phe	Ile	Glu	Asn	Leu	Leu	Pro	Ser	Asp	Gly	Asp	Phe	Trp	95	100	105	
Ile	Gly	Leu	Arg	Arg	Arg	Glu	Glu	Lys	Gln	Ser	Asn	Ser	Thr	Ala	110	115	120	
Cys	Gln	Asp	Leu	Tyr	Ala	Trp	Thr	Asp	Gly	Ser	Ile	Ser	Gln	Phe	125	130	135	
Arg	Asn	Trp	Tyr	Val	Asp	Glu	Pro	Ser	Cys	Gly	Ser	Glu	Val	Cys	140	145	150	
Val	Val	Met	Tyr	His	Gln	Pro	Ser	Ala	Pro	Ala	Gly	Ile	Gly	Gly	155	160	165	
Pro	Tyr	Met	Phe	Gln	Trp	Asn	Asp	Asp	Arg	Cys	Asn	Met	Lys	Asn	170	175	180	
Asn	Phe	Ile	Cys	Lys	Tyr	Ser	Asp	Glu	Lys	Pro	Ala	Val	Pro	Ser	185	190	195	
Arg	Glu	Ala	Glu	Gly	Glu	Glu	Thr	Glu	Leu	Thr	Thr	Pro	Val	Leu	200	205	210	
Pro	Glu	Glu	Thr	Gln	Glu	Glu	Asp	Ala	Lys	Lys	Thr	Phe	Lys	Glu	215	220	225	
Ser	Arg	Glu	Ala	Ala	Leu	Asn	Leu	Ala	Tyr	Ile	Leu	Ile	Pro	Ser	230	235	240	
Ile	Pro	Leu	Leu	Leu	Leu	Leu	Val	Val	Thr	Thr	Val	Val	Cys	Trp	245	250	255	
Val	Trp	Ile	Cys	Arg	Lys	Arg	Lys	Arg	Glu	Gln	Pro	Asp	Pro	Ser	260	265	270	
Thr	Lys	Lys	Gln	His	Thr	Ile	Trp	Pro	Ser	Pro	His	Gln	Gly	Asn	275	280	285	
Ser	Pro	Asp	Leu	Glu	Val	Tyr	Asn	Val	Ile	Arg	Lys	Gln	Ser	Glu	290	295	300	

P1618P2C2 sequence listing.txt

Ala	Asp	Leu	Ala	Glu	Thr	Arg	Pro	Asp	Leu	Lys	Asn	Ile	Ser	Phe
				305					310					315
Arg	Val	Cys	Ser	Gly	Glu	Ala	Thr	Pro	Asp	Asp	Met	Ser	Cys	Asp
				320					325					330
Tyr	Asp	Asn	Met	Ala	Val	Asn	Pro	Ser	Glu	Ser	Gly	Phe	Val	Thr
				335					340					345
Leu	Val	Ser	Val	Glu	Ser	Gly	Phe	Val	Thr	Asn	Asp	Ile	Tyr	Glu
				350					355					360
Phe	Ser	Pro	Asp	Gln	Met	Gly	Arg	Ser	Lys	Glu	Ser	Gly	Trp	Val
				365					370					375
Glu	Asn	Glu	Ile	Tyr	Gly	Tyr								
				380										

<210> 138  
 <211> 50  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Synthetic Oligonucleotide Probe

<400> 138  
 gttcattgaa aacctcttgc catctgatgg tgacttctgg attgggctca 50

<210> 139  
 <211> 24  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Synthetic Oligonucleotide Probe

<400> 139  
 aagccaaaga agcctgcagg aggg 24

<210> 140  
 <211> 24  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Synthetic Oligonucleotide Probe

<400> 140  
 cagtccaagc ataaaggtcc tggc 24

<210> 141  
 <211> 1514  
 <212> DNA  
 <213> Homo Sapien

<400> 141  
 ggggtctccc tcagggccgg gaggcacagc ggtccctgct tgctgaaggg 50  
 ctggatgtac gcatccgcag gttcccgcgg acttgggggc gcccgcgtgag 100  
 ccccggcgcc cgcagaagac ttgtgtttgc ctctgcagc ctcaaccgg 150

P1618P2C2 sequence listing.txt

```

agggcagcga gggcctacca ccatgatcac tgggtgtgttc agcatgctgct 200
tgtggacccc agtgggctgc ctgacctgcg tggcgactg cctgcaccag 250
cggcggggtgg ccctggccga gctgcaggag gccgatggcc agtgtccggt 300
cgaccgcagc ctgctgaagt tgaaaatggt gcaggctcgtg tttcgacacg 350
gggctcggag tcctctcaag ccgctcccg c tggaggagca ggtagagtgg 400
aacccccagc tattagaggt cccaccccaa actcagtttg attacacagt 450
caccaatcta gctggtggtc cgaaaccata ttctccttac gactctcaat 500
accatgagac caccctgaag gggggcatgt ttgctgggca gctgaccaag 550
gtgggcatgc agcaaagtgt tgccttgga gagagactga ggaagaacta 600
tgtggaagac attccctttt tttcaccaac cttcaacca caggaggtct 650
ttattcgctt cactaacatt tttcggaatc tggagtccac ccgttgtttg 700
ctggctgggc ttttccagtg tcagaaagaa ggacccatca tcatccacac 750
tgatgaagca gattcagaag tcttgatatc caactaccaa agctgctgga 800
gcctgaggca gagaaccaga ggccggaggc agactgcctc tttacagcca 850
ggaatctcag aggatttgaa aaaggatgaag gacaggatgg gcattgacag 900
tagtgataaa gtggacttct tcatcctcct ggacaacgtg gctgccgagc 950
aggcacacaa cctcccaagc tgcccatgc tgaagagatt tgcacggatg 1000
atcgaaacaga gagctgtgga cacatccttg tacatactgc ccaaggaaga 1050
cagggaaaagt cttcagatgg cagtaggccc attcctccac atcctagaga 1100
gcaacctgct gaaagccatg gactctgcca ctgccccga caagatcaga 1150
aagctgtatc tctatgcggc tcatgatgtg accttcatac cgctcttaat 1200
gaccctgggg atttttgacc acaaattggcc accgtttgct gttgacctga 1250
ccatggaact ttaccagcac ctggaatcta aggagtgggt tgtgcagctc 1300
tattaccag ggaaggagca ggtgccgaga ggttgccctg atgggctctg 1350
cccgtggac atgttcttga atgccatgct agtttatacc ttaagcccag 1400
aaaaatacca tgcactctgc tctcaaaactc aggtgatgga agttggaaat 1450
gaagagtaac tgatttataa aagcaggatg tgttgatttt aaaataaagt 1500
gcctttatac aatg 1514

```

<210> 142

<211> 428

<212> PRT

<213> Homo Sapien

<400> 142

Met Ile Thr Gly Val Phe Ser Met Arg Leu Trp Thr Pro Val Gly

P1618P2C2 sequence listing.txt

1	5	10	15
Val	Leu	Thr	Ser
20	Ala	Tyr	Cys
25	Leu	His	Gln
30	Arg	Arg	Val
35	Ala	Glu	Leu
40	Gln	Ala	Asp
45	Gly	Gln	Cys
50	Pro	Val	Asp
55	Arg	His	Gly
60	Val	Phe	Arg
65	Leu	Lys	Pro
70	Leu	Pro	Leu
75	Glu	Glu	Gln
80	Val	Pro	Pro
85	Gln	Thr	Gln
90	Phe	Asp	Tyr
95	Ser	Pro	Lys
100	Gly	Gly	Pro
105	Thr	Val	Thr
110	Asn	Leu	Ala
115	Gly	Thr	Thr
120	Met	Gly	Gly
125	Leu	Thr	Lys
130	Met	Gln	Gln
135	Ala	Phe	Met
140	Leu	Arg	Leu
145	Val	Tyr	Asn
150	Val	Glu	Lys
155	Val	Glu	Pro
160	Val	Ile	Asp
165	Thr	Ser	Arg
170	Leu	Leu	Leu
175	Ala	Gly	Leu
180	Asp	Thr	His
185	Leu	Ile	Ile
190	Leu	Ile	His
195	Thr	Asp	Glu
200	Val	Glu	Leu
205	Tyr	Asn	Pro
210	Trp	Cys	Ser
215	Thr	Ala	Ser
220	Gln	Thr	Ala
225	Gln	Arg	Arg
230	Glu	Asp	Leu
235	Val	Lys	Lys
240	Met	Arg	Asp
245	Met	Arg	Asp
250	Phe	Ile	Leu
255	Leu	Leu	Asp
260	Gln	Ala	His
265	Leu	Asn	Leu
270	Pro	Ser	Cys
275	Met	Pro	Met
280	Arg	Ala	Val
285	Thr	Asp	Val
290	Pro	Lys	Glu
295	Arg	Asp	Glu
300	Met	Gln	Leu
305	Leu	Ile	His
310	Glu	Leu	Leu
315	Lys	Leu	Leu
320	Leu	Tyr	Leu
325	Leu	Tyr	Leu
330	Leu	Tyr	Leu
335	Leu	Tyr	Leu
340	Leu	Tyr	Leu
345	Leu	Tyr	Leu
350	Leu	Tyr	Leu
355	Leu	Tyr	Leu
360	Leu	Tyr	Leu
365	Leu	Tyr	Leu
370	Leu	Tyr	Leu
375	Leu	Tyr	Leu
380	Leu	Tyr	Leu
385	Leu	Tyr	Leu
390	Leu	Tyr	Leu
395	Leu	Tyr	Leu
400	Leu	Tyr	Leu
405	Leu	Tyr	Leu
410	Leu	Tyr	Leu
415	Leu	Tyr	Leu
420	Leu	Tyr	Leu
425	Leu	Tyr	Leu
430	Leu	Tyr	Leu
435	Leu	Tyr	Leu
440	Leu	Tyr	Leu
445	Leu	Tyr	Leu
450	Leu	Tyr	Leu
455	Leu	Tyr	Leu
460	Leu	Tyr	Leu
465	Leu	Tyr	Leu
470	Leu	Tyr	Leu
475	Leu	Tyr	Leu
480	Leu	Tyr	Leu
485	Leu	Tyr	Leu
490	Leu	Tyr	Leu
495	Leu	Tyr	Leu
500	Leu	Tyr	Leu
505	Leu	Tyr	Leu
510	Leu	Tyr	Leu
515	Leu	Tyr	Leu
520	Leu	Tyr	Leu
525	Leu	Tyr	Leu
530	Leu	Tyr	Leu
535	Leu	Tyr	Leu
540	Leu	Tyr	Leu
545	Leu	Tyr	Leu
550	Leu	Tyr	Leu
555	Leu	Tyr	Leu
560	Leu	Tyr	Leu
565	Leu	Tyr	Leu
570	Leu	Tyr	Leu
575	Leu	Tyr	Leu
580	Leu	Tyr	Leu
585	Leu	Tyr	Leu
590	Leu	Tyr	Leu
595	Leu	Tyr	Leu
600	Leu	Tyr	Leu
605	Leu	Tyr	Leu
610	Leu	Tyr	Leu
615	Leu	Tyr	Leu
620	Leu	Tyr	Leu
625	Leu	Tyr	Leu
630	Leu	Tyr	Leu
635	Leu	Tyr	Leu
640	Leu	Tyr	Leu
645	Leu	Tyr	Leu
650	Leu	Tyr	Leu
655	Leu	Tyr	Leu
660	Leu	Tyr	Leu
665	Leu	Tyr	Leu
670	Leu	Tyr	Leu
675	Leu	Tyr	Leu
680	Leu	Tyr	Leu
685	Leu	Tyr	Leu
690	Leu	Tyr	Leu
695	Leu	Tyr	Leu
700	Leu	Tyr	Leu
705	Leu	Tyr	Leu
710	Leu	Tyr	Leu
715	Leu	Tyr	Leu
720	Leu	Tyr	Leu
725	Leu	Tyr	Leu
730	Leu	Tyr	Leu
735	Leu	Tyr	Leu
740	Leu	Tyr	Leu
745	Leu	Tyr	Leu
750	Leu	Tyr	Leu
755	Leu	Tyr	Leu
760	Leu	Tyr	Leu
765	Leu	Tyr	Leu
770	Leu	Tyr	Leu
775	Leu	Tyr	Leu
780	Leu	Tyr	Leu
785	Leu	Tyr	Leu
790	Leu	Tyr	Leu
795	Leu	Tyr	Leu
800	Leu	Tyr	Leu
805	Leu	Tyr	Leu
810	Leu	Tyr	Leu
815	Leu	Tyr	Leu
820	Leu	Tyr	Leu
825	Leu	Tyr	Leu
830	Leu	Tyr	Leu
835	Leu	Tyr	Leu
840	Leu	Tyr	Leu
845	Leu	Tyr	Leu
850	Leu	Tyr	Leu
855	Leu	Tyr	Leu
860	Leu	Tyr	Leu
865	Leu	Tyr	Leu
870	Leu	Tyr	Leu
875	Leu	Tyr	Leu
880	Leu	Tyr	Leu
885	Leu	Tyr	Leu
890	Leu	Tyr	Leu
895	Leu	Tyr	Leu
900	Leu	Tyr	Leu
905	Leu	Tyr	Leu
910	Leu	Tyr	Leu
915	Leu	Tyr	Leu
920	Leu	Tyr	Leu
925	Leu	Tyr	Leu
930	Leu	Tyr	Leu
935	Leu	Tyr	Leu
940	Leu	Tyr	Leu
945	Leu	Tyr	Leu
950	Leu	Tyr	Leu
955	Leu	Tyr	Leu
960	Leu	Tyr	Leu
965	Leu	Tyr	Leu
970	Leu	Tyr	Leu
975	Leu	Tyr	Leu
980	Leu	Tyr	Leu
985	Leu	Tyr	Leu
990	Leu	Tyr	Leu
995	Leu	Tyr	Leu



P1618P2C2 sequence listing.txt

320

325

330

Tyr	Ala	Ala	His	Asp	Val	Thr	Phe	Ile	Pro	Leu	Leu	Met	Thr	Leu
				335					340					345
Gly	Ile	Phe	Asp	His	Lys	Trp	Pro	Pro	Phe	Ala	Val	Asp	Leu	Thr
				350					355					360
Met	Glu	Leu	Tyr	Gln	His	Leu	Glu	Ser	Lys	Glu	Trp	Phe	Val	Gln
				365					370					375
Leu	Tyr	Tyr	His	Gly	Lys	Glu	Gln	Val	Pro	Arg	Gly	Cys	Pro	Asp
				380					385					390
Gly	Leu	Cys	Pro	Leu	Asp	Met	Phe	Leu	Asn	Ala	Met	Ser	Val	Tyr
				395					400					405
Thr	Leu	Ser	Pro	Glu	Lys	Tyr	His	Ala	Leu	Cys	Ser	Gln	Thr	Gln
				410					415					420
Val	Met	Glu	Val	Gly	Asn	Glu	Glu							
				425										

<210> 143

<211> 24

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic Oligonucleotide Probe

<400> 143

ccaactacca aagctgctgg agcc 24

<210> 144

<211> 24

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic Oligonucleotide Probe

<400> 144

gcagctctat taccacggga agga 24

<210> 145

<211> 24

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic Oligonucleotide Probe

<400> 145

tccttcccgt ggtaatagag ctgc 24

<210> 146

<211> 45

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic Oligonucleotide Probe

P1618P2C2 sequence listing.txt

<400> 146

ggcagagaac cagaggccgg aggagactgc ctctttacag ccagg 45

<210> 147

<211> 1686

<212> DNA

<213> Homo Sapien

<400> 147

ctcctcttaa catacttgca gctaaaacta aatattgctg cttggggacc 50  
tccttctagc cttaaatttc agctcatcac cttcacctgc cttgggtcatg 100  
gctctgctat tctccttgat ccttgccatt tgcaccagac ctggattcct 150  
agcgtctcca tctggagtgc ggctgggtggg gggcctccac cgctgtgaag 200  
ggcgggtgga ggtggaacag aaaggccagt ggggcaccgt gtgtgatgac 250  
ggctgggaca ttaaggacgt ggctgtgttg tgccgggagc tgggctgtgg 300  
agctgccagc ggaaccccta gtggtatttt gtatgagcca ccagcagaaa 350  
aagagcaaaa ggtcctcatc caatcagtca gttgcacagg aacagaagat 400  
acattggctc agtgtgagca agaagaagtt tatgattggt cacatgatga 450  
agatgctggg gcatcgtgtg agaaccaga gagctctttc tccccagtcc 500  
cagaggggtg caggctggct gacggccctg ggcattgcaa gggacgcgtg 550  
gaagtgaagc accagaacca gtggtatacc gtgtgccaga caggctggag 600  
cctccggggc gcaaagggtg tgtgccggca gctgggatgt gggagggctg 650  
tactgactca aaaacgctgc aacaagcatg cctatggccg aaaacccatc 700  
tggctgagcc agatgtcatg ctcaggacga gaagcaaccc ttcaggattg 750  
cccttctggg ccttggggga agaacacctg caaccatgat gaagacacgt 800  
gggtcgaatg tgaagatccc ttgacttga gactagtagg aggagacaac 850  
ctctgctctg ggcgactgga ggtgctgcac aagggcgtat ggggctctgt 900  
ctgtgatgac aactggggag aaaaggagga ccagggtggt tgcaagcaac 950  
tgggctgtgg gaagtccctc tctccctcct tcagagaccg gaaatgctat 1000  
ggccctgggg ttggccgcat ctggctggat aatgttcgtt gctcagggga 1050  
ggagcagtcc ctggagcagt gccagcacag attttggggg ttccacgact 1100  
gcacccacca ggaagatgtg gctgtcatct gctcagtgt ggtgggcatc 1150  
atctaactctg ttgagtgcct gaatagaaga aaaacacaga agaagggagc 1200  
atttactgtc tacatgactg catgggatga aactgatct tcttctgccc 1250  
ttggactggg acttatactt ggtgcccctg attctcaggc cttcagagtt 1300  
ggatcagaac ttacaacatc aggtctagtt ctcaggccat cagacatagt 1350

P1618P2C2 sequence listing.txt

ttggaactac atcaccacct ttcctatgtc tccacattgc acacagcaga 1400  
 ttcccagcct ccataattgt gtgtatcaac tacttaaata cattctcaca 1450  
 cacacacaca cacacacaca cacacacaca cacacataca ccatttgtcc 1500  
 tgtttctctg aagaactctg acaaaataca gattttggta ctgaaagaga 1550  
 ttctagagga acggaatttt aaggataaat tttctgaatt ggttatgggg 1600  
 tttctgaaat tggctctata atctaattag atataaaatt ctggttaactt 1650  
 tattttacaat aataaagata gcactatgtg ttcaaa 1686

<210> 148

<211> 347

<212> PRT

<213> Homo Sapien

<400> 148

Met	Ala	Leu	Leu	Phe	Ser	Leu	Ile	Leu	Ala	Ile	Cys	Thr	Arg	Pro	1	5	10	15
Gly	Phe	Leu	Ala	Ser	Pro	Ser	Gly	Val	Arg	Leu	Val	Gly	Gly	Leu	20	25	30	
His	Arg	Cys	Glu	Gly	Arg	Val	Glu	Val	Glu	Gln	Lys	Gly	Gln	Trp	35	40	45	
Gly	Thr	Val	Cys	Asp	Asp	Gly	Trp	Asp	Ile	Lys	Asp	Val	Ala	Val	50	55	60	
Leu	Cys	Arg	Glu	Leu	Gly	Cys	Gly	Ala	Ala	Ser	Gly	Thr	Pro	Ser	65	70	75	
Gly	Ile	Leu	Tyr	Glu	Pro	Pro	Ala	Glu	Lys	Glu	Gln	Lys	Val	Leu	80	85	90	
Ile	Gln	Ser	Val	Ser	Cys	Thr	Gly	Thr	Glu	Asp	Thr	Leu	Ala	Gln	95	100	105	
Cys	Glu	Gln	Glu	Glu	Val	Tyr	Asp	Cys	Ser	His	Asp	Glu	Asp	Ala	110	115	120	
Gly	Ala	Ser	Cys	Glu	Asn	Pro	Glu	Ser	Ser	Phe	Ser	Pro	Val	Pro	125	130	135	
Glu	Gly	Val	Arg	Leu	Ala	Asp	Gly	Pro	Gly	His	Cys	Lys	Gly	Arg	140	145	150	
Val	Glu	Val	Lys	His	Gln	Asn	Gln	Trp	Tyr	Thr	Val	Cys	Gln	Thr	155	160	165	
Gly	Trp	Ser	Leu	Arg	Ala	Ala	Lys	Val	Val	Cys	Arg	Gln	Leu	Gly	170	175	180	
Cys	Gly	Arg	Ala	Val	Leu	Thr	Gln	Lys	Arg	Cys	Asn	Lys	His	Ala	185	190	195	
Tyr	Gly	Arg	Lys	Pro	Ile	Trp	Leu	Ser	Gln	Met	Ser	Cys	Ser	Gly	200	205	210	

P1618P2C2 sequence listing.txt

Arg	Glu	Ala	Thr	Leu	Gln	Asp	Cys	Pro	Ser	Gly	Pro	Trp	Gly	Lys
				215					220					225
Asn	Thr	Cys	Asn	His	Asp	Glu	Asp	Thr	Trp	Val	Glu	Cys	Glu	Asp
				230					235					240
Pro	Phe	Asp	Leu	Arg	Leu	Val	Gly	Gly	Asp	Asn	Leu	Cys	Ser	Gly
				245					250					255
Arg	Leu	Glu	Val	Leu	His	Lys	Gly	Val	Trp	Gly	Ser	Val	Cys	Asp
				260					265					270
Asp	Asn	Trp	Gly	Glu	Lys	Glu	Asp	Gln	Val	Val	Cys	Lys	Gln	Leu
				275					280					285
Gly	Cys	Gly	Lys	Ser	Leu	Ser	Pro	Ser	Phe	Arg	Asp	Arg	Lys	Cys
				290					295					300
Tyr	Gly	Pro	Gly	Val	Gly	Arg	Ile	Trp	Leu	Asp	Asn	Val	Arg	Cys
				305					310					315
Ser	Gly	Glu	Glu	Gln	Ser	Leu	Glu	Gln	Cys	Gln	His	Arg	Phe	Trp
				320					325					330
Gly	Phe	His	Asp	Cys	Thr	His	Gln	Glu	Asp	Val	Ala	Val	Ile	Cys
				335					340					345

Ser Val

<210> 149  
 <211> 24  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Synthetic Oligonucleotide Probe

<400> 149  
 ttcagctcat caccttcacc tgcc 24

<210> 150  
 <211> 24  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Synthetic Oligonucleotide Probe

<400> 150  
 ggctcataca aaataccact aggg 24

<210> 151  
 <211> 50  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Synthetic Oligonucleotide Probe

<400> 151  
 gggcctccac cgctgtgaag ggcgggtgga ggtggaacag aaaggccagt 50

P1618P2C2 sequence listing.txt

<210> 152

<211> 1427

<212> DNA

<213> Homo Sapien

<400> 152

```

actgcactcg gttctatcga ttgaattccc cggggatcct ctagagatcc 50
ctcgacctcg acccacgcgt ccgcggacgc gtgggcggac gcgtgggccg 100
gctaccagga agagtctgcc gaagggtgaag gccatggact tcatcacctc 150
cacagccatc ctgcccctgc tgttcggctg cctgggcgtc ttcggcctct 200
tccggctgct gcagtgggtg cgcgggaagg cctacctgcg gaatgctgtg 250
gtggtgatca caggcgccac ctgaggctg ggcaaagaat gtgcaaaagt 300
cttctatgct gcgggtgcta aactggtgct ctgtggccgg aatggtgggg 350
ccctagaaga gctcatcaga gaacttaccg cttctcatgc caccaagggtg 400
cagacacaca agccttactt ggtgaccttc gacctcacag actctggggc 450
catagttgca gcagcagctg agatcctgca gtgctttggc tatgtcgaca 500
tacttgtcaa caatgctggg atcagctacc gtggtaccat catggacacc 550
acagtggatg tggacaagag ggtcatggag acaaactact ttggcccagt 600
tgctctaacg aaagcactcc tgccctccat gatcaagagg aggcaaggcc 650
acattgtcgc catcagcagc atccagggca agatgagcat tccttttcga 700
tcagcatatg cagcctccaa gcacgcaacc caggctttct ttgactgtct 750
gcgtgccgag atggaacagt atgaaattga ggtgaccgtc atcagccccg 800
gctacatcca caccaacctc tctgtaaatg ccatcaccgc ggatggatct 850
aggatatggag ttatggacac caccacagcc cagggccgaa gccctgtgga 900
ggtggcccag gatgttcttg ctgctgtggg gaagaagaag aaagatgtga 950
tcctggctga cttactgcct tccttggtg tttatcttcg aactctggct 1000
cctgggctct tcttcagcct catggcctcc agggccagaa aagagcggaa 1050
atccaagaac tcctagtact ctgaccagcc agggccaggg cagagaagca 1100
gcactcttag gcttgcttac tctacaaggg acagttgcat ttgttgagac 1150
tttaatggag atttgtctca caagtgggaa agactgaaga aacacatctc 1200
gtgcagatct gctggcagag gacaatcaaa aacgacaaca agcttcttcc 1250
cagggtgagg ggaaacactt aaggaataaa tatggagctg gggtttaaca 1300
ctaaaaacta gaaataaaca tctcaaacag taaaaaaaaa aaaaaagggc 1350
ggccgcgact ctagagtcga cctgcagaag cttggccgcc atggcccaac 1400
ttgtttattg cagcttataa tggttac 1427

```

P1618P2C2 sequence listing.txt

<210> 153  
 <211> 310  
 <212> PRT  
 <213> Homo Sapien

<400> 153  
 Met Asp Phe Ile Thr Ser Thr Ala Ile Leu Pro Leu Leu Phe Gly  
 1 5 10 15  
 Cys Leu Gly Val Phe Gly Leu Phe Arg Leu Leu Gln Trp Val Arg  
 20 25 30  
 Gly Lys Ala Tyr Leu Arg Asn Ala Val Val Val Ile Thr Gly Ala  
 35 40 45  
 Thr Ser Gly Leu Gly Lys Glu Cys Ala Lys Val Phe Tyr Ala Ala  
 50 55 60  
 Gly Ala Lys Leu Val Leu Cys Gly Arg Asn Gly Gly Ala Leu Glu  
 65 70 75  
 Glu Leu Ile Arg Glu Leu Thr Ala Ser His Ala Thr Lys Val Gln  
 80 85 90  
 Thr His Lys Pro Tyr Leu Val Thr Phe Asp Leu Thr Asp Ser Gly  
 95 100 105  
 Ala Ile Val Ala Ala Ala Ala Glu Ile Leu Gln Cys Phe Gly Tyr  
 110 115 120  
 Val Asp Ile Leu Val Asn Asn Ala Gly Ile Ser Tyr Arg Gly Thr  
 125 130 135  
 Ile Met Asp Thr Thr Val Asp Val Asp Lys Arg Val Met Glu Thr  
 140 145 150  
 Asn Tyr Phe Gly Pro Val Ala Leu Thr Lys Ala Leu Leu Pro Ser  
 155 160 165  
 Met Ile Lys Arg Arg Gln Gly His Ile Val Ala Ile Ser Ser Ile  
 170 175 180  
 Gln Gly Lys Met Ser Ile Pro Phe Arg Ser Ala Tyr Ala Ala Ser  
 185 190 195  
 Lys His Ala Thr Gln Ala Phe Phe Asp Cys Leu Arg Ala Glu Met  
 200 205 210  
 Glu Gln Tyr Glu Ile Glu Val Thr Val Ile Ser Pro Gly Tyr Ile  
 215 220 225  
 His Thr Asn Leu Ser Val Asn Ala Ile Thr Ala Asp Gly Ser Arg  
 230 235 240  
 Tyr Gly Val Met Asp Thr Thr Thr Ala Gln Gly Arg Ser Pro Val  
 245 250 255  
 Glu Val Ala Gln Asp Val Leu Ala Ala Val Gly Lys Lys Lys Lys  
 260 265 270  
 Asp Val Ile Leu Ala Asp Leu Leu Pro Ser Leu Ala Val Tyr Leu  
 275 280 285

P1618P2C2 sequence listing.txt

Arg Thr Leu Ala Pro Gly Leu Phe Phe Ser Leu Met Ala Ser Arg  
290 295 300

Ala Arg Lys Glu Arg Lys Ser Lys Asn Ser  
305 310

<210> 154  
<211> 24  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Synthetic Oligonucleotide Probe

<400> 154  
ggtgctaaac tggctgctctg tggc 24

<210> 155  
<211> 20  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Synthetic Oligonucleotide Probe

<400> 155  
cagggcaaga tgagcattcc 20

<210> 156  
<211> 24  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Synthetic Oligonucleotide Probe

<400> 156  
tcatactggt ccattctcggc acgc 24

<210> 157  
<211> 50  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Synthetic Oligonucleotide Probe

<400> 157  
aatggtgggg ccctagaaga gctcatcaga gaactcaccg cttctcatgc 50

<210> 158  
<211> 1771  
<212> DNA  
<213> Homo Sapien

<400> 158  
cccacgcgtc cgctggtggt agatcgagca accctctaaa agcagtttag 50  
agtggtaaaa aaaaaaaaaa acacaccaa cgctcgcagc cacaaaagg 100  
atgaaatttc ttctggacat cctcctgctt ctcccgttac tgatcgtctg 150

P1618P2C2 sequence listing.txt

ctccctagag tccttcgtga agctttttat tcctaagagg agaaaatcag 200  
tcaccggcga aatcgtgctg attacaggag ctgggcatgg aattgggaga 250  
ctgactgcct atgaatttgc taaacttaaa agcaagctgg ttctctggga 300  
tataaataag catggactgg aggaaacagc tgccaaatgc aagggactgg 350  
gtgccaaagg tcataccttt gtggttagact gcagcaaccg agaagatatt 400  
tacagctctg caaagaagg gaaggcagaa attggagatg ttagtatttt 450  
agtaaataat gctggtgtag tctatacatc agatttggtt gctacacaag 500  
atcctcagat tgaaaagact tttgaagtta atgtacttgc acatttctgg 550  
actacaaagg catttcttcc tgcaatgacg aagaataacc atggccatat 600  
tgtcactgtg gcttcggcag ctggacatgt ctcggtcccc ttcttactgg 650  
cttactgttc aagcaagttt gctgctgttg gatttcataa aactttgaca 700  
gatgaactgg ctgccttaca aataactgga gtcaaaacaa catgtctgtg 750  
tcctaatttc gtaaactctg gcttcatcaa aaatccaagt acaagtttgg 800  
gaccactctt ggaacctgag gaagtggtaa acaggctgat gcatgggatt 850  
ctgactgagc agaagatgat ttttattcca tcttctatag cttttttaac 900  
aacattggaa aggatccttc ctgagcgttt cctggcagtt ttaaaacgaa 950  
aaatcagtgt taagtttgat gcagttattg gatataaaat gaaagcgcaa 1000  
taagcaccta gtttctgaa aactgattta ccaggtttag gttgatgtca 1050  
tctaatagtg ccagaatttt aatgtttgaa cttctgtttt ttctaattat 1100  
ccccatttct tcaatatcat ttttgaggct ttggcagtct tcatttacta 1150  
ccacttgttc tttagccaaa agctgattac atatgatata aacagagaaa 1200  
tacctttaga ggtgacttta aggaaaatga agaaaaagaa ccaaaatgac 1250  
tttattaaaa taatttccaa gattatttgt ggctcacctg aaggctttgc 1300  
aaaatttgta ccataaccgt ttatttaaca tatattttta tttttgattg 1350  
cacttaaatt ttgtataatt tgtgtttctt tttctgttct acataaaatc 1400  
agaaacttca agctctctaa ataaaatgaa ggactatatc tagtggtatt 1450  
tcacaatgaa tatcatgaac tctcaatggg taggtttcat cctaccatt 1500  
gccactctgt ttcttgagag atacctcaca ttccaatgcc aaacatttct 1550  
gcacagggaa gctagagggtg gatacacgtg ttgcaagtat aaaagcatca 1600  
ctgggattta aggagaattg agagaatgta cccacaaatg gcagcaataa 1650  
taaatggatc acacttaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 1700  
aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 1750



P1618P2C2 sequence listing.txt

aaaaaaaaa aaaaaaaaa a 1771

<210> 159

<211> 300

<212> PRT

<213> Homo Sapien

<400> 159

```

Met Lys Phe Leu Leu Asp Ile Leu Leu Leu Leu Pro Leu Leu Ile
 1          5          10          15
Val Cys Ser Leu Glu Ser Phe Val Lys Leu Phe Ile Pro Lys Arg
          20          25          30
Arg Lys Ser Val Thr Gly Glu Ile Val Leu Ile Thr Gly Ala Gly
          35          40          45
His Gly Ile Gly Arg Leu Thr Ala Tyr Glu Phe Ala Lys Leu Lys
          50          55          60
Ser Lys Leu Val Leu Trp Asp Ile Asn Lys His Gly Leu Glu Glu
          65          70          75
Thr Ala Ala Lys Cys Lys Gly Leu Gly Ala Lys Val His Thr Phe
          80          85          90
Val Val Asp Cys Ser Asn Arg Glu Asp Ile Tyr Ser Ser Ala Lys
          95          100          105
Lys Val Lys Ala Glu Ile Gly Asp Val Ser Ile Leu Val Asn Asn
          110          115          120
Ala Gly Val Val Tyr Thr Ser Asp Leu Phe Ala Thr Gln Asp Pro
          125          130          135
Gln Ile Glu Lys Thr Phe Glu Val Asn Val Leu Ala His Phe Trp
          140          145          150
Thr Thr Lys Ala Phe Leu Pro Ala Met Thr Lys Asn Asn His Gly
          155          160          165
His Ile Val Thr Val Ala Ser Ala Ala Gly His Val Ser Val Pro
          170          175          180
Phe Leu Leu Ala Tyr Cys Ser Ser Lys Phe Ala Ala Val Gly Phe
          185          190          195
His Lys Thr Leu Thr Asp Glu Leu Ala Ala Leu Gln Ile Thr Gly
          200          205          210
Val Lys Thr Thr Cys Leu Cys Pro Asn Phe Val Asn Thr Gly Phe
          215          220          225
Ile Lys Asn Pro Ser Thr Ser Leu Gly Pro Thr Leu Glu Pro Glu
          230          235          240
Glu Val Val Asn Arg Leu Met His Gly Ile Leu Thr Glu Gln Lys
          245          250          255
Met Ile Phe Ile Pro Ser Ser Ile Ala Phe Leu Thr Thr Leu Glu
          260          265          270

```

P1618P2C2 sequence listing.txt

Arg Ile Leu Pro Glu Arg Phe Leu Ala Val Leu Lys Arg Lys Ile  
275 280 285

Ser Val Lys Phe Asp Ala Val Ile Gly Tyr Lys Met Lys Ala Gln  
290 295 300

<210> 160

<211> 23

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic Oligonucleotide Probe

<400> 160

ggatgaaggca gaaattggag atg 23

<210> 161

<211> 24

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic Oligonucleotide Probe

<400> 161

atcccatgca tcagcctgtt tacc 24

<210> 162

<211> 48

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic Oligonucleotide Probe

<400> 162

gctggtgtag tctatacatc agatttggtt gctacacaag atcctcag 48

<210> 163

<211> 2076

<212> DNA

<213> Homo Sapien

<400> 163

cccacgcgtc cgcggacgcg tgggtcgact agttctagat cgcgagcggc 50

cgccccgcggc tcagggagga gcaccgactg cgccgcaccc tgagagatgg 100

ttggtgccat gtggaagggtg attgtttcgc tggctctgtt gatgcctggc 150

ccctgtgatg ggctgtttcg ctccctatac agaagtgttt ccatgccacc 200

taagggagac tcaggacagc cattatttct cacccttac attgaagctg 250

ggaagatcca aaaaggaaga gaattgagtt tggctcgccc tttcccagga 300

ctgaacatga agagttatgc cggcttcctc accgtgaata agacttaca 350

cagcaacctc ttcttctggt tcttcccagc tcagatacag ccagaagatg 400

ccccagtagt tctctggcta caggggtggc cgggaggttc atccatgttt 450

P1618P2C2 sequence listing.txt

ggactctttg tggaacatgg gccttatgtt gtcacaagta acatgacctt 500  
gcgtgacaga gacttcccct ggaccacaac gctctccatg ctttacattg 550  
acaatccagt gggcacaggg ttcatgttta ctgatgatac ccacggatat 600  
gcagtcaatg aggacgatgt agcacgggat ttatacagtg cactaattca 650  
gtttttccag atatttcctg aatataaaaa taatgacttt tatgtcactg 700  
gggagtctta tgcagggaaa tatgtgccag ccattgcaca cctcatccat 750  
tccctcaacc ctgtgagaga ggtgaagatc aacctgaacg gaattgctat 800  
tggagatgga tattctgata ccgaatcaat tatagggggc tatgcagaat 850  
tcctgtacca aattggcttg ttggatgaga agcaaaaaaa gtacttccag 900  
aagcagtgcc atgaatgcat agaacacatc aggaagcaga actggtttga 950  
ggcctttgaa atactggata aactactaga tggcgactta acaagtgatc 1000  
cttcttactt ccagaatgtt acaggatgta gtaattacta taactttttg 1050  
cggtgcacgg aacctgagga tcagctttac tatgtgaaat ttttgcact 1100  
cccagaggtg agacaagcca tccacgtggg gaatcagact tttaatgatg 1150  
gaactatagt tgaaaagtac ttgcgagaag atacagtaca gtcagttaag 1200  
ccatggttaa ctgaaatcat gaataattat aagggttctga tctacaatgg 1250  
ccaactggac atcatcgtgg cagctgccct gacagagcgc tccttgatgg 1300  
gcatggactg gaaaggatcc caggaataca agaaggcaga aaaaaaagtt 1350  
tggaagatct ttaaacttga cagtgaagtg gctggttaca tccggcaagc 1400  
gggtgacttc catcaggtaa ttattcgagg tggaggacat attttaccct 1450  
atgaccagcc tctgagagct ttgacatga ttaatcgatt catttatgga 1500  
aaaggatggg atccttatgt tggataaact accttccaa aagagaacat 1550  
cagaggtttt cattgctgaa aagaaaatcg taaaaacaga aaatgtcata 1600  
ggaataaaaa aattatcttt tcatatctgc aagatttttt tcatcaataa 1650  
aaattatcct tgaaacaagt gagcttttgt ttttgggggg agatgtttac 1700  
tacaaaatta acatgagtac atgagtaaga attacattat ttaacttaaa 1750  
ggatgaaagg tatggatgat gtgacactga gacaagatgt ataatgaaa 1800  
ttttagggtc ttgaatagga agttttaatt tcttctaaga gtaagtgaaa 1850  
agtgcagttg taacaaacaa agctgtaaca tctttttctg ccaataacag 1900  
aagtttggca tgccgtgaag gtgttttgaa atattattgg ataagaatag 1950  
ctcaattatc ccaataaat ggatgaagct ataatagttt tggggaaaag 2000  
attctcaa at gtataaagtc ttagaacaaa agaattcttt gaaataaaaa 2050

P1618P2C2 sequence listing.txt

tattatatat aaaagtaaaa aaaaaa 2076

<210> 164  
<211> 476  
<212> PRT  
<213> Homo Sapien

<400> 164

Met	Val	Gly	Ala	Met	Trp	Lys	Val	Ile	Val	Ser	Leu	Val	Leu	Leu	1	5	10	15
Met	Pro	Gly	Pro	Cys	Asp	Gly	Leu	Phe	Arg	Ser	Leu	Tyr	Arg	Ser	20	25	30	
Val	Ser	Met	Pro	Pro	Lys	Gly	Asp	Ser	Gly	Gln	Pro	Leu	Phe	Leu	35	40	45	
Thr	Pro	Tyr	Ile	Glu	Ala	Gly	Lys	Ile	Gln	Lys	Gly	Arg	Glu	Leu	50	55	60	
Ser	Leu	Val	Gly	Pro	Phe	Pro	Gly	Leu	Asn	Met	Lys	Ser	Tyr	Ala	65	70	75	
Gly	Phe	Leu	Thr	Val	Asn	Lys	Thr	Tyr	Asn	Ser	Asn	Leu	Phe	Phe	80	85	90	
Trp	Phe	Phe	Pro	Ala	Gln	Ile	Gln	Pro	Glu	Asp	Ala	Pro	Val	Val	95	100	105	
Leu	Trp	Leu	Gln	Gly	Gly	Pro	Gly	Gly	Ser	Ser	Met	Phe	Gly	Leu	110	115	120	
Phe	Val	Glu	His	Gly	Pro	Tyr	Val	Val	Thr	Ser	Asn	Met	Thr	Leu	125	130	135	
Arg	Asp	Arg	Asp	Phe	Pro	Trp	Thr	Thr	Thr	Leu	Ser	Met	Leu	Tyr	140	145	150	
Ile	Asp	Asn	Pro	Val	Gly	Thr	Gly	Phe	Ser	Phe	Thr	Asp	Asp	Thr	155	160	165	
His	Gly	Tyr	Ala	Val	Asn	Glu	Asp	Asp	Val	Ala	Arg	Asp	Leu	Tyr	170	175	180	
Ser	Ala	Leu	Ile	Gln	Phe	Phe	Gln	Ile	Phe	Pro	Glu	Tyr	Lys	Asn	185	190	195	
Asn	Asp	Phe	Tyr	Val	Thr	Gly	Glu	Ser	Tyr	Ala	Gly	Lys	Tyr	Val	200	205	210	
Pro	Ala	Ile	Ala	His	Leu	Ile	His	Ser	Leu	Asn	Pro	Val	Arg	Glu	215	220	225	
Val	Lys	Ile	Asn	Leu	Asn	Gly	Ile	Ala	Ile	Gly	Asp	Gly	Tyr	Ser	230	235	240	
Asp	Pro	Glu	Ser	Ile	Ile	Gly	Gly	Tyr	Ala	Glu	Phe	Leu	Tyr	Gln	245	250	255	
Ile	Gly	Leu	Leu	Asp	Glu	Lys	Gln	Lys	Lys	Tyr	Phe	Gln	Lys	Gln	260	265	270	

P1618P2C2 sequence listing.txt

Cys His Glu Cys Ile Glu His Ile Arg Lys Gln Asn Trp Phe Glu  
275 280 285

Ala Phe Glu Ile Leu Asp Lys Leu Leu Asp Gly Asp Leu Thr Ser  
290 295 300

Asp Pro Ser Tyr Phe Gln Asn Val Thr Gly Cys Ser Asn Tyr Tyr  
305 310 315

Asn Phe Leu Arg Cys Thr Glu Pro Glu Asp Gln Leu Tyr Tyr Val  
320 325 330

Lys Phe Leu Ser Leu Pro Glu Val Arg Gln Ala Ile His Val Gly  
335 340 345

Asn Gln Thr Phe Asn Asp Gly Thr Ile Val Glu Lys Tyr Leu Arg  
350 355 360

Glu Asp Thr Val Gln Ser Val Lys Pro Trp Leu Thr Glu Ile Met  
365 370 375

Asn Asn Tyr Lys Val Leu Ile Tyr Asn Gly Gln Leu Asp Ile Ile  
380 385 390

Val Ala Ala Ala Leu Thr Glu Arg Ser Leu Met Gly Met Asp Trp  
395 400 405

Lys Gly Ser Gln Glu Tyr Lys Lys Ala Glu Lys Lys Val Trp Lys  
410 415 420

Ile Phe Lys Ser Asp Ser Glu Val Ala Gly Tyr Ile Arg Gln Ala  
425 430 435

Gly Asp Phe His Gln Val Ile Ile Arg Gly Gly Gly His Ile Leu  
440 445 450

Pro Tyr Asp Gln Pro Leu Arg Ala Phe Asp Met Ile Asn Arg Phe  
455 460 465

Ile Tyr Gly Lys Gly Trp Asp Pro Tyr Val Gly  
470 475

<210> 165  
<211> 24  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Synthetic Oligonucleotide Probe

<400> 165  
ttccatgcca cctaaggag actc 24

<210> 166  
<211> 24  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Synthetic Oligonucleotide Probe

<400> 166  
tggatgaggt gtgcaatggc tggc 24

P1618P2C2 sequence listing.txt

<210> 167  
 <211> 24  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Synthetic Oligonucleotide Probe

<400> 167  
 agctctcaga ggctggatcat aggg 24

<210> 168  
 <211> 50  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Synthetic Oligonucleotide Probe

<400> 168  
 gtcggccctt tcccaggact gaacatgaag agttatgccg gcttcctcac 50

<210> 169  
 <211> 2477  
 <212> DNA  
 <213> Homo Sapien

<400> 169  
 cgagggcctt tccggctccg gaatggcaca tgtgggaatc ccagtcttgt 50  
 tggctacaac atttttccct ttcctaaca gttctaacag ctgttctaac 100  
 agctagtgat caggggttct tcttgctgga gaagaaaggg ctgagggcag 150  
 agcagggcac tctcactcag ggtgaccagc tccttgccctc tctgtggata 200  
 acagagcatg agaaagtga gagatgcagc ggagtgaagt gatggaagtc 250  
 taaaatagga aggaattttg tgtgcaatat cagactctgg gagcagttga 300  
 cctggagagc ctgggggagg gcctgcctaa caagctttca aaaaacagga 350  
 gcgacttcca ctgggctggg ataagacgtg ccggtaggat agggaagact 400  
 ggggttagtc ctaatatcaa attgactggc tgggtgaact tcaacagcct 450  
 tttaacctct ctgggagatg aaaacgatgg cttaaggggc cagaaataga 500  
 gatgctttgt aaaataaaat tttaaaaaaa gcaagtattt tatagcataa 550  
 aggctagaga ccaaaataga taacaggatt ccctgaacat tcctaagagg 600  
 gagaaagtat gttaaaaata gaaaaaccaa aatgcagaag gaggagactc 650  
 acagagctaa accaggatgg ggaccctggg tcaggccagc ctctttgctc 700  
 ctccccgaaa ttatttttgg tctgaccact ctgccttggtg ttttgcagaa 750  
 tcatgtgagg gccaaccggg gaaggtggag cagatgagca cacacaggag 800  
 ccgtctcctc accgccgccc ctctcagcat ggaacagagg cagccctggc 850

P1618P2C2 sequence listing.txt

```

cccgggccct ggaggtggac agccgctctg tggctctgct ctgagtggtc 900
tgggtgctgc tggccccccc agcagccggc atgcctcagt tcagcacctt 950
ccactctgag aatcgtgact ggaccttcaa ccacttgacc gtccaccaag 1000
ggacgggggc cgtctatgtg gggggccatca accgggtcta taagctgaca 1050
ggcaacctga ccatccaggt ggctcataag acagggccag aagaggacaa 1100
caagtctcgt taccggcccc tcactgtgca gccctgcagc gaagtgtcga 1150
ccctcaccaa caatgtcaac aagctgtcga tcattgacta ctctgagaac 1200
cgctgtctgg cctgtgggag cctctaccag ggggtctgca agctgtgcg 1250
gctggatgac ctcttcatcc tgggtggagcc atcccacaag aaggagcact 1300
acctgtccag tgtcaacaag acgggcacca tgtacggggt gattgtgcgc 1350
tctgaggggtg aggatggcaa gctcttcatc ggcacggctg tggatgggaa 1400
gcaggattac ttcccgaccc tgtccagccg gaagctgccc cgagaccctg 1450
agtcctcagc catgctcgac tatgagctac acagcgattt tgtctcctct 1500
ctcatcaaga tcccttcaga caccctggcc ctgggtctccc actttgacat 1550
cttctacatc tacggctttg ctagtggggg ctttgtctac tttctcactg 1600
tccagccccg gacccttgag ggtgtggcca tcaactccgc tggagacctc 1650
ttctacacct cacgcatcgt gcggctctgc aaggatgacc ccaagttcca 1700
ctcatacgtg tccctgccct tcggctgcac ccggggccggg gtggaatacc 1750
gcctcctgca ggctgcttac ctggccaagc ctggggactc actggcccag 1800
gccttcaata tcaccagcca ggacgatgta ctctttgcca tcttctccaa 1850
agggcagaag cagtatcacc acccgcccga tgactctgcc ctgtgtgcct 1900
tccctatccg ggccatcaac ttgcagatca aggagcgctt gcagtcctgc 1950
taccagggcg agggcaacct ggagctcaac tggctgctgg ggaaggacgt 2000
ccagtgcacg aaggcgctg tccccatcga tgataacttc tgtggactgg 2050
acatcaacca gcccctggga ggctcaactc cagtggaggg cctgaccctg 2100
tacaccacca gcagggaccg catgacctct gtggcctcct acgtttacaa 2150
cggctacagc gtggtttttg tggggactaa gagtggcaag ctgaaaaagg 2200
taagagtcta tgagttcaga tgctccaatg ccattcacct cctcagcaaa 2250
gagtccctct tggaaggtag ctattggtgg agatttaact ataggcaact 2300
ttattttctt ggggaacaaa ggtgaaatgg ggaggtgaaga aggggttaat 2350
tttgtgactt agcttctagc tacttctccc agccatcagt cattgggtat 2400
gtaaggaatg caagcgtatt tcaatatttc ccaaacttta agaaaaaact 2450

```

P1618P2C2 sequence listing.txt

ttaagaaggt acatctgcaa aagcaaa 2477

<210> 170

<211> 552

<212> PRT

<213> Homo Sapien

<400> 170

Met Gly Thr Leu Gly Gln Ala Ser Leu Phe Ala Pro Pro Gly Asn  
1 5 10 15

Tyr Phe Trp Ser Asp His Ser Ala Leu Cys Phe Ala Glu Ser Cys  
20 25 30

Glu Gly Gln Pro Gly Lys Val Glu Gln Met Ser Thr His Arg Ser  
35 40 45

Arg Leu Leu Thr Ala Ala Pro Leu Ser Met Glu Gln Arg Gln Pro  
50 55 60

Trp Pro Arg Ala Leu Glu Val Asp Ser Arg Ser Val Val Leu Leu  
65 70 75

Ser Val Val Trp Val Leu Leu Ala Pro Pro Ala Ala Gly Met Pro  
80 85 90

Gln Phe Ser Thr Phe His Ser Glu Asn Arg Asp Trp Thr Phe Asn  
95 100 105

His Leu Thr Val His Gln Gly Thr Gly Ala Val Tyr Val Gly Ala  
110 115 120

Ile Asn Arg Val Tyr Lys Leu Thr Gly Asn Leu Thr Ile Gln Val  
125 130 135

Ala His Lys Thr Gly Pro Glu Glu Asp Asn Lys Ser Arg Tyr Pro  
140 145 150

Pro Leu Ile Val Gln Pro Cys Ser Glu Val Leu Thr Leu Thr Asn  
155 160 165

Asn Val Asn Lys Leu Leu Ile Ile Asp Tyr Ser Glu Asn Arg Leu  
170 175 180

Leu Ala Cys Gly Ser Leu Tyr Gln Gly Val Cys Lys Leu Leu Arg  
185 190 195

Leu Asp Asp Leu Phe Ile Leu Val Glu Pro Ser His Lys Lys Glu  
200 205 210

His Tyr Leu Ser Ser Val Asn Lys Thr Gly Thr Met Tyr Gly Val  
215 220 225

Ile Val Arg Ser Glu Gly Glu Asp Gly Lys Leu Phe Ile Gly Thr  
230 235 240

Ala Val Asp Gly Lys Gln Asp Tyr Phe Pro Thr Leu Ser Ser Arg  
245 250 255

Lys Leu Pro Arg Asp Pro Glu Ser Ser Ala Met Leu Asp Tyr Glu  
260 265 270



P1618P2C2 sequence listing.txt

```

Leu His Ser Asp Phe Val Ser Ser Leu Ile Lys Ile Pro Ser Asp
275 280 285

Thr Leu Ala Leu Val Ser His Phe Asp Ile Phe Tyr Ile Tyr Gly
290 295 300

Phe Ala Ser Gly Gly Phe Val Tyr Phe Leu Thr Val Gln Pro Glu
305 310 315

Thr Pro Glu Gly Val Ala Ile Asn Ser Ala Gly Asp Leu Phe Tyr
320 325 330

Thr Ser Arg Ile Val Arg Leu Cys Lys Asp Asp Pro Lys Phe His
335 340 345

Ser Tyr Val Ser Leu Pro Phe Gly Cys Thr Arg Ala Gly Val Glu
350 355 360

Tyr Arg Leu Leu Gln Ala Ala Tyr Leu Ala Lys Pro Gly Asp Ser
365 370 375

Leu Ala Gln Ala Phe Asn Ile Thr Ser Gln Asp Asp Val Leu Phe
380 385 390

Ala Ile Phe Ser Lys Gly Gln Lys Gln Tyr His His Pro Pro Asp
395 400 405

Asp Ser Ala Leu Cys Ala Phe Pro Ile Arg Ala Ile Asn Leu Gln
410 415 420

Ile Lys Glu Arg Leu Gln Ser Cys Tyr Gln Gly Glu Gly Asn Leu
425 430 435

Glu Leu Asn Trp Leu Leu Gly Lys Asp Val Gln Cys Thr Lys Ala
440 445 450

Pro Val Pro Ile Asp Asp Asn Phe Cys Gly Leu Asp Ile Asn Gln
455 460 465

Pro Leu Gly Gly Ser Thr Pro Val Glu Gly Leu Thr Leu Tyr Thr
470 475 480

Thr Ser Arg Asp Arg Met Thr Ser Val Ala Ser Tyr Val Tyr Asn
485 490 495

Gly Tyr Ser Val Val Phe Val Gly Thr Lys Ser Gly Lys Leu Lys
500 505 510

Lys Val Arg Val Tyr Glu Phe Arg Cys Ser Asn Ala Ile His Leu
515 520 525

Leu Ser Lys Glu Ser Leu Leu Glu Gly Ser Tyr Trp Trp Arg Phe
530 535 540

Asn Tyr Arg Gln Leu Tyr Phe Leu Gly Glu Gln Arg
545 550

```

<210> 171  
 <211> 20  
 <212> DNA  
 <213> Artificial Sequence

<220>

P1618P2C2 sequence listing.txt

<223> Synthetic Oligonucleotide Probe

<400> 171  
tggaataaccg cctcctgcag 20

<210> 172  
<211> 24  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Synthetic Oligonucleotide Probe

<400> 172  
cttctgccct ttggagaaga tggc 24

<210> 173  
<211> 43  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Synthetic oligonucleotide probe

<400> 173  
ggactcactg gccaggcct tcaatatcac cagccaggac gat 43

<210> 174  
<211> 3106  
<212> DNA  
<213> Homo Sapien

<220>  
<221> unsure  
<222> 1683  
<223> unknown base

<400> 174  
aggctccccg gcgcggctga gtgcggactg gagtgggaac ccgggtcccc 50  
gcgcttagag aacacgcgat gaccacgtgg agcctccggc ggaggccggc 100  
ccgcacgctg ggactcctgc tgctggctgt cttgggcttc ctggtgctcc 150  
gcaggctgga ctggagcacc ctggctccctc tgcggctccg ccatcgacag 200  
ctggggctgc aggccaaggg ctggaacttc atgctggagg attccacctt 250  
ctggatcttc gggggctcca tccactatth ccgtgtgccc agggagtact 300  
ggagggaccg cctgctgaag atgaaggcct gtggcttgaa caccctcacc 350  
acctatgttc cgtggaacct gcatgagcca gaaagaggca aatttgactt 400  
ctctgggaac ctggacctgg aggccttcgt cctgatggcc gcagagatcg 450  
ggctgtgggt gattctgcgt ccaggcccct acatctgcag tgagatggac 500  
ctcgggggct tgcccagctg gctactccaa gaccctggca tgaggctgag 550  
gacaacttac aagggttca ccgaagcagt ggacctttat ttgaccacc 600  
tgatgtccag ggtggtgcca ctccagtaca agcgtggggg acctatcatt 650

P1618P2C2 sequence listing.txt

gccgtgcagg tggagaatga atatggttcc tataataaag accccgcata 700  
 catgccctac gtcaagaagg cactggagga ccgtggcatt gtggaactgc 750  
 tcctgacttc agacaacaag gatgggctga gcaaggggat tgtccagga 800  
 gtcttgcca ccatcaactt gcagtcaaca cacgagctgc agctactgac 850  
 cacctttctc ttcaacgtcc aggggactca gcccaagatg gtgatggagt 900  
 actggacggg gtggtttgac tcgtggggag gccctcaca tatcttggat 950  
 tcttctgagg ttttgaaaac cgtgtctgcc attgtggacg ccggctcctc 1000  
 catcaacctc tacatgttcc acggaggcac caactttggc ttcatgaatg 1050  
 gagccatgca cttccatgac tacaagtcag atgtcaccag ctatgactat 1100  
 gatgctgtgc tgacagaagc cggcgattac acggccaagt acatgaagct 1150  
 tcgagacttc ttcggctcca tctcaggcat ccctctccct cccccacctg 1200  
 accttcttcc caagatgccg tatgagccct taacgccagt cttgtacctg 1250  
 tctctgtggg acgccctcaa gtacctggg gagccaatca agtctgaaaa 1300  
 gcccatcaac atggagaacc tgccagtcaa tgggggaaat ggacagtcct 1350  
 tcgggtacat tctctatgag accagcatca cctcgtctgg catcctcagt 1400  
 ggccacgtgc atgatcggg gcagggtgtt gtgaacacag tatccatagg 1450  
 attcttggac tacaagacaa cgaagattgc tgtccccctg atccagggtt 1500  
 acaccgtgct gaggatcttg gtggagaatc gtgggcgagt caactatggg 1550  
 gagaatattg atgaccagcg caaaggctta attggaaatc tctatctgaa 1600  
 tgattcacc ctgaaaaact tcagaatcta tagcctggat atgaagaaga 1650  
 gcttctttca gaggttcggc ctggacaaat gngttccct cccagaaaca 1700  
 cccacattac ctgctttctt cttgggtagc ttgtccatca gtcacagcc 1750  
 ttgtgacacc tttctgaagc tggagggctg ggagaagggg gttgtattca 1800  
 tcaatggcca gaaccttgga cgttactgga acattggacc ccagaagacg 1850  
 ctttacctcc caggctccctg gttgagcagc ggaatcaacc aggtcatcgt 1900  
 ttttgaggag acgatggcgg gccctgcatt acagttcacg gaaaccccc 1950  
 acctgggcag gaaccagtac attaagttag cggtggcacc cctcctgct 2000  
 ggtgccagtg ggagactgcc gcctcctctt gacctgaagc ctggtggctg 2050  
 ctgccccacc cctcactgca aaagcatctc cttaaagtag aacctcaggg 2100  
 actgggggct acagtctgcc cctgtctcag ctcaaaacc taagcctgca 2150  
 gggaaagggt ggatggctct gggcctggct ttgttgatga tggcttctc 2200

P1618P2C2 sequence listing.txt

acagccctgc tcttgtgccg aggctgtcgg gctgtctcta gggtagggagc 2250  
 agctaatacag atcgcccagc ctttggccct cagaaaaagt gctgaaacgt 2300  
 gcccttgacac cggacgtcac agccctgcga gcatctgctg gactcaggcg 2350  
 tgctctttgc tggttcctgg gaggcttggc cacatccctc atggcccat 2400  
 tttatccccg aaatcctggg tgtgtcacca gtgtagaggg tggggaagg 2450  
 gtgtctcacc tgagctgact ttgttcttcc ttcacaacct tctgagcctt 2500  
 ctttgggatt ctggaaggaa ctgcggcgtga gaaacatgtg acttccccctt 2550  
 tcccttccca ctgctgctt cccacagggt gacaggctgg gctggagaaa 2600  
 cagaaatcct caccctgcgt cttcccaagt tagcagggtgt ctctggtgtt 2650  
 cagtgaggag gacatgtgag tcctggcaga agccatggcc catgtctgca 2700  
 catccaggga ggaggacaga aggcccagct cacatgtgag tcctggcaga 2750  
 agccatggcc catgtctgca catccaggga ggaggacaga aggcccagct 2800  
 cacatgtgag tcctggcaga agccatggcc catgtctgca catccaggga 2850  
 ggaggacaga aggcccagct cacatgtgag tcctggcaga agccatggcc 2900  
 catgtctgca catccaggga ggaggacaga aggcccagct cagtggcccc 2950  
 cgctccccac cccccacgcc cgaacagcag gggcagagca gccctcctc 3000  
 gaagtgtgtc caagtccgca tttgagcctt gttctggggc ccagcccaac 3050  
 acctggcttg ggctcactgt cctgagttgc agtaaagcta taaccttgaa 3100  
 tcacaa 3106

<210> 175  
 <211> 636  
 <212> PRT  
 <213> Homo Sapien

<220>  
 <221> unsure  
 <222> 539  
 <223> unknown amino acid

<400> 175  
 Met Thr Thr Trp Ser Leu Arg Arg Arg Pro Ala Arg Thr Leu Gly  
 1 5 10 15  
 Leu Leu Leu Leu Val Val Leu Gly Phe Leu Val Leu Arg Arg Leu  
 20 25 30  
 Asp Trp Ser Thr Leu Val Pro Leu Arg Leu Arg His Arg Gln Leu  
 35 40 45  
 Gly Leu Gln Ala Lys Gly Trp Asn Phe Met Leu Glu Asp Ser Thr  
 50 55 60  
 Phe Trp Ile Phe Gly Gly Ser Ile His Tyr Phe Arg Val Pro Arg  
 65 70 75

P1618P2C2 sequence listing.txt

Glu Tyr Trp Arg	Asp	Arg Leu Leu Lys	Met	Lys Ala Cys Gly	Leu
	80		85		90
Asn Thr Leu Thr	Thr	Tyr Val Pro Trp	Asn	Leu His Glu Pro	Glu
	95		100		105
Arg Gly Lys Phe	Asp	Phe Ser Gly Asn	Leu	Asp Leu Glu Ala	Phe
	110		115		120
Val Leu Met Ala	Ala	Glu Ile Gly Leu	Trp	Val Ile Leu Arg	Pro
	125		130		135
Gly Pro Tyr Ile	Cys	Ser Glu Met Asp	Leu	Gly Gly Leu Pro	Ser
	140		145		150
Trp Leu Leu Gln	Asp	Pro Gly Met Arg	Leu	Arg Thr Thr Tyr	Lys
	155		160		165
Gly Phe Thr Glu	Ala	Val Asp Leu Tyr	Phe	Asp His Leu Met	Ser
	170		175		180
Arg Val Val Pro	Leu	Gln Tyr Lys Arg	Gly	Gly Pro Ile Ile	Ala
	185		190		195
Val Gln Val Glu	Asn	Glu Tyr Gly Ser	Tyr	Asn Lys Asp Pro	Ala
	200		205		210
Tyr Met Pro Tyr	Val	Lys Lys Ala Leu	Glu	Asp Arg Gly Ile	Val
	215		220		225
Glu Leu Leu Leu	Thr	Ser Asp Asn Lys	Asp	Gly Leu Ser Lys	Gly
	230		235		240
Ile Val Gln Gly	Val	Leu Ala Thr Ile	Asn	Leu Gln Ser Thr	His
	245		250		255
Glu Leu Gln Leu	Leu	Thr Thr Phe Leu	Phe	Asn Val Gln Gly	Thr
	260		265		270
Gln Pro Lys Met	Val	Met Glu Tyr Trp	Thr	Gly Trp Phe Asp	Ser
	275		280		285
Trp Gly Gly Pro	His	Asn Ile Leu Asp	Ser	Ser Glu Val Leu	Lys
	290		295		300
Thr Val Ser Ala	Ile	Val Asp Ala Gly	Ser	Ser Ile Asn Leu	Tyr
	305		310		315
Met Phe His Gly	Gly	Thr Asn Phe Gly	Phe	Met Asn Gly Ala	Met
	320		325		330
His Phe His Asp	Tyr	Lys Ser Asp Val	Thr	Ser Tyr Asp Tyr	Asp
	335		340		345
Ala Val Leu Thr	Glu	Ala Gly Asp Tyr	Thr	Ala Lys Tyr Met	Lys
	350		355		360
Leu Arg Asp Phe	Phe	Gly Ser Ile Ser	Gly	Ile Pro Leu Pro	Pro
	365		370		375
Pro Pro Asp Leu	Leu	Pro Lys Met Pro	Tyr	Glu Pro Leu Thr	Pro
	380		385		390

P1618P2C2 sequence listing.txt

```

Val Leu Tyr Leu Ser Leu Trp Asp Ala Leu Lys Tyr Leu Gly Glu
395 400 405
Pro Ile Lys Ser Glu Lys Pro Ile Asn Met Glu Asn Leu Pro Val
410 415 420
Asn Gly Gly Asn Gly Gln Ser Phe Gly Tyr Ile Leu Tyr Glu Thr
425 430 435
Ser Ile Thr Ser Ser Gly Ile Leu Ser Gly His Val His Asp Arg
440 445 450
Gly Gln Val Phe Val Asn Thr Val Ser Ile Gly Phe Leu Asp Tyr
455 460 465
Lys Thr Thr Lys Ile Ala Val Pro Leu Ile Gln Gly Tyr Thr Val
470 475 480
Leu Arg Ile Leu Val Glu Asn Arg Gly Arg Val Asn Tyr Gly Glu
485 490 495
Asn Ile Asp Asp Gln Arg Lys Gly Leu Ile Gly Asn Leu Tyr Leu
500 505 510
Asn Asp Ser Pro Leu Lys Asn Phe Arg Ile Tyr Ser Leu Asp Met
515 520 525
Lys Lys Ser Phe Phe Gln Arg Phe Gly Leu Asp Lys Trp Xaa Ser
530 535 540
Leu Pro Glu Thr Pro Thr Leu Pro Ala Phe Phe Leu Gly Ser Leu
545 550 555
Ser Ile Ser Ser Thr Pro Cys Asp Thr Phe Leu Lys Leu Glu Gly
560 565 570
Trp Glu Lys Gly Val Val Phe Ile Asn Gly Gln Asn Leu Gly Arg
575 580 585
Tyr Trp Asn Ile Gly Pro Gln Lys Thr Leu Tyr Leu Pro Gly Pro
590 595 600
Trp Leu Ser Ser Gly Ile Asn Gln Val Ile Val Phe Glu Glu Thr
605 610 615
Met Ala Gly Pro Ala Leu Gln Phe Thr Glu Thr Pro His Leu Gly
620 625 630

```

Arg Asn Gln Tyr Ile Lys  
635

<210> 176  
 <211> 2505  
 <212> DNA  
 <213> Homo Sapien

<400> 176  
 ggggacgcgg agctgagagg ctccgggcta gctaggtgta ggggtggacg 50  
 ggtcccagga ccctggtgag ggttctctac ttggccttcg gtgggggtca 100  
 agacgcaggc acctacgcca aaggggagca aagccgggct cggcccagg 150

P1618P2C2 sequence listing.txt

```

ccccaggac ctccatctcc caatgttggg ggaatccgac acgtgacggg 200
ctgtccgccg tctcagacta gaggagcgct gtaaaccgca tggctcccaa 250
gaagctgtcc tgccttcgtt ccctgctgct gccgctcagc ctgacgctac 300
tgctgccccca ggcagacact cggctcgttcg tagtgatag gggcatgac 350
cggtttctcc tagacggggc cccgttccgc tatgtgtctg gcagcctgca 400
ctactttcgg gtaccgcggg tgctttgggc cgaccggctt ttgaagatgc 450
gatggagcgg cctcaacgcc atacagtttt atgtgccctg gaactaccac 500
gagccacagc ctgggggtcta taactttaat ggcagccggg acctcattgc 550
ctttctgaat gaggcagctc tagcgaacct gttggtcata ctgagaccag 600
gaccttacat ctgtgcagag tgggagatgg ggggtctccc atcctgggtg 650
cttcgaaaac ctgaaattca tctaagaacc tcagatccag acttccttgc 700
cgcagtggac tcctgggtca aggtcttgct gcccaagata tatccatggc 750
tttatcacia tgggggcaac atcattagca ttcagggtga gaatgaatat 800
ggtagctaca gagcctgtga cttcagctac atgaggcact tggctgggct 850
cttccgtgca ctgctaggag aaaagatctt gctcttcacc acagatgggc 900
ctgaaggact caagtgtggc tccctccggg gactctatac cactgtagat 950
tttggcccag ctgacaacat gaccaaatac tttaccctgc ttcggaagta 1000
tgaaccccat gggccattgg taaactctga gtactacaca ggctggctgg 1050
attactgggg ccagaatcac tccacacggg ctgtgtcagc tgtaaccaa 1100
ggactagaga acatgctcaa gttgggagcc agtgtgaaca tgtacatgtt 1150
ccatggaggt accaactttg gatattggaa tgggtccgat aagaaggac 1200
gcttccttcc gattactacc agctatgact atgatgcacc tatacttgaa 1250
gcaggggacc ccacaccta gctttttgct cttcgagatg tcatcagcaa 1300
gttccaggaa gttcctttgg gacctttacc tcccccgagc cccaagatga 1350
tgcttgacc tgtgactctg cacctgggtg ggcatttact ggctttccta 1400
gacttgcttt gccccgtgg gccattcat tcaatcttgc caatgacctt 1450
tgaggctgtc aagcaggacc atggcttcat gttgtaccga acctatatga 1500
cccataccat ttttgagcca acaccattct gggtgccaaa taatggagtc 1550
catgaccgtg cctatgtgat ggtggatggg gtgttccagg gtgtgtgga 1600
gcgaaatatg agagacaaac tatttttgac ggggaaactg gggccaac 1650
tggatatctt ggtggagaac atggggaggc tcagctttgg gtctaacagc 1700

```

P1618P2C2 sequence listing.txt

agtgacttca agggcctgtt gaagccacca attctggggc aaacaatcct 1750  
taccagtggt atgatgttcc ctctgaaaat tgataacctt gtgaagtggg 1800  
ggtttcccct ccagttgcca aaatggccat atcctcaagc tccttctggc 1850  
cccacattct actccaaaac atttccaatt ttaggctcag ttggggacac 1900  
atttctatat ctacctggat ggaccaaggg ccaagtctgg atcaatgggt 1950  
ttaacttggg ccggtactgg acaaagcagg ggccacaaca gaccctctac 2000  
gtgccaagat tcctgctgtt tcctagggga gccctcaaca aaattacatt 2050  
gctggaacta gaagatgtac ctctccagcc ccaagtccaa tttttggata 2100  
agcctatcct caatagcact agtactttgc acaggacaca tatcaattcc 2150  
ctttcagctg atacactgag tgcctctgaa ccaatggagt taagtgggca 2200  
ctgaaaggta ggccgggcat ggtggctcat gcctgtaatc ccagcacttt 2250  
gggaggctga gacgggtgga ttacctgagg tcaggacttc aagaccagcc 2300  
tgccaacat ggtgaaaccc cgtctccact aaaaatacaa aaattagccg 2350  
ggcgtgatgg tgggcacctc taatcccagc tacttgggag gctgagggca 2400  
ggagaattgc ttgaatccag gaggcagagg ttgcagtgag tggaggttgt 2450  
accactgcac tccagcctgg ctgacagtga gacactccat ctcaaaaaaa 2500  
aaaaa 2505

<210> 177  
<211> 654  
<212> PRT  
<213> Homo Sapien

<400> 177

Met	Ala	Pro	Lys	Lys	Leu	Ser	Cys	Leu	Arg	Ser	Leu	Leu	Leu	Pro
1				5					10					15
Leu	Ser	Leu	Thr	Leu	Leu	Leu	Pro	Gln	Ala	Asp	Thr	Arg	Ser	Phe
				20					25					30
Val	Val	Asp	Arg	Gly	His	Asp	Arg	Phe	Leu	Leu	Asp	Gly	Ala	Pro
				35					40					45
Phe	Arg	Tyr	Val	Ser	Gly	Ser	Leu	His	Tyr	Phe	Arg	Val	Pro	Arg
				50					55					60
Val	Leu	Trp	Ala	Asp	Arg	Leu	Leu	Lys	Met	Arg	Trp	Ser	Gly	Leu
				65					70					75
Asn	Ala	Ile	Gln	Phe	Tyr	Val	Pro	Trp	Asn	Tyr	His	Glu	Pro	Gln
				80					85					90
Pro	Gly	Val	Tyr	Asn	Phe	Asn	Gly	Ser	Arg	Asp	Leu	Ile	Ala	Phe
				95					100					105
Leu	Asn	Glu	Ala	Ala	Leu	Ala	Asn	Leu	Leu	Val	Ile	Leu	Arg	Pro
				110					115					120



P1618P2C2 sequence listing.txt

Gly Pro Tyr Ile	Cys Ala Glu Trp Glu	Met Gly Gly Leu Pro	Ser
125		130	135
Trp Leu Leu Arg	Lys Pro Glu Ile His	Leu Arg Thr Ser Asp	Pro
140		145	150
Asp Phe Leu Ala	Ala Val Asp Ser Trp	Phe Lys Val Leu Leu	Pro
155		160	165
Lys Ile Tyr Pro	Trp Leu Tyr His Asn	Gly Gly Asn Ile Ile	Ser
170		175	180
Ile Gln Val Glu	Asn Glu Tyr Gly Ser	Tyr Arg Ala Cys Asp	Phe
185		190	195
Ser Tyr Met Arg	His Leu Ala Gly Leu	Phe Arg Ala Leu Leu	Gly
200		205	210
Glu Lys Ile Leu	Leu Phe Thr Thr Asp	Gly Pro Glu Gly Leu	Lys
215		220	225
Cys Gly Ser Leu	Arg Gly Leu Tyr Thr	Thr Val Asp Phe Gly	Pro
230		235	240
Ala Asp Asn Met	Thr Lys Ile Phe Thr	Leu Leu Arg Lys Tyr	Glu
245		250	255
Pro His Gly Pro	Leu Val Asn Ser Glu	Tyr Tyr Thr Gly Trp	Leu
260		265	270
Asp Tyr Trp Gly	Gln Asn His Ser Thr	Arg Ser Val Ser Ala	Val
275		280	285
Thr Lys Gly Leu	Glu Asn Met Leu Lys	Leu Gly Ala Ser Val	Asn
290		295	300
Met Tyr Met Phe	His Gly Gly Thr Asn	Phe Gly Tyr Trp Asn	Gly
305		310	315
Ala Asp Lys Lys	Gly Arg Phe Leu Pro	Ile Thr Thr Ser Tyr	Asp
320		325	330
Tyr Asp Ala Pro	Ile Ser Glu Ala Gly	Asp Pro Thr Pro Lys	Leu
335		340	345
Phe Ala Leu Arg	Asp Val Ile Ser Lys	Phe Gln Glu Val Pro	Leu
350		355	360
Gly Pro Leu Pro	Pro Pro Ser Pro Lys	Met Met Leu Gly Pro	Val
365		370	375
Thr Leu His Leu	Val Gly His Leu Leu	Ala Phe Leu Asp Leu	Leu
380		385	390
Cys Pro Arg Gly	Pro Ile His Ser Ile	Leu Pro Met Thr Phe	Glu
395		400	405
Ala Val Lys Gln	Asp His Gly Phe Met	Leu Tyr Arg Thr Tyr	Met
410		415	420
Thr His Thr Ile	Phe Glu Pro Thr Pro	Phe Trp Val Pro Asn	Asn
425		430	435

P1618P2C2 sequence listing.txt

Gly Val His Asp	Arg	Ala Tyr Val Met	Val	Asp Gly Val Phe	Gln
	440		445		450
Gly Val Val Glu	Arg	Asn Met Arg Asp	Lys	Leu Phe Leu Thr	Gly
	455		460		465
Lys Leu Gly Ser	Lys	Leu Asp Ile Leu	Val	Glu Asn Met Gly	Arg
	470		475		480
Leu Ser Phe Gly	Ser	Asn Ser Ser Asp	Phe	Lys Gly Leu Leu	Lys
	485		490		495
Pro Pro Ile Leu	Gly	Gln Thr Ile Leu	Thr	Gln Trp Met Met	Phe
	500		505		510
Pro Leu Lys Ile	Asp	Asn Leu Val Lys	Trp	Trp Phe Pro Leu	Gln
	515		520		525
Leu Pro Lys Trp	Pro	Tyr Pro Gln Ala	Pro	Ser Gly Pro Thr	Phe
	530		535		540
Tyr Ser Lys Thr	Phe	Pro Ile Leu Gly	Ser	Val Gly Asp Thr	Phe
	545		550		555
Leu Tyr Leu Pro	Gly	Trp Thr Lys Gly	Gln	Val Trp Ile Asn	Gly
	560		565		570
Phe Asn Leu Gly	Arg	Tyr Trp Thr Lys	Gln	Gly Pro Gln Gln	Thr
	575		580		585
Leu Tyr Val Pro	Arg	Phe Leu Leu Phe	Pro	Arg Gly Ala Leu	Asn
	590		595		600
Lys Ile Thr Leu	Leu	Glu Leu Glu Asp	Val	Pro Leu Gln Pro	Gln
	605		610		615
Val Gln Phe Leu	Asp	Lys Pro Ile Leu	Asn	Ser Thr Ser Thr	Leu
	620		625		630
His Arg Thr His	Ile	Asn Ser Leu Ser	Ala	Asp Thr Leu Ser	Ala
	635		640		645
Ser Glu Pro Met	Glu	Leu Ser Gly His			
	650				

<210> 178

<211> 24

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic Oligonucleotide Probe

<400> 178

tggtactcc aagaccctgg catg 24

<210> 179

<211> 24

<212> DNA

<213> Artificial Sequence

<220>

P1618P2C2 sequence listing.txt

<223> Synthetic Oligonucleotide Probe

<400> 179  
tggacaaatc cccttgctca gccc 24

<210> 180  
<211> 50  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Synthetic Oligonucleotide Probe

<400> 180  
gggcttcacc gaagcagtgg acctttatctt tgaccacctg atgtccaggg 50

<210> 181  
<211> 22  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Synthetic Oligonucleotide Probe

<400> 181  
ccagctatga ctatgatgca cc 22

<210> 182  
<211> 24  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Synthetic Oligonucleotide Probe

<400> 182  
tggcacccag aatggtgttg gctc 24

<210> 183  
<211> 50  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Synthetic Oligonucleotide Probe

<400> 183  
cgagatgtca tcagcaagtt ccaggaagtt cctttgggac ctttacctcc 50

<210> 184  
<211> 1947  
<212> DNA  
<213> Homo Sapien

<400> 184  
gctttgaaca cgtctgcaag cccaaagttg agcatctgat tggttatgag 50  
gtatttgagt gcaccacaa tatggcttac atgttgaaaa agcttctcat 100  
cagttacata tccattatctt gtgtttatgg ctttatctgc ctctacactc 150  
tcttctgggtt attcaggata cctttgaagg aatattcttt cgaaaaagtc 200

P1618P2C2 sequence listing.txt

agagaagaga gcagtttttag tgacattcca gatgtcaaaa acgattttgc 250  
gttccttctt cacatggttag accagtatga ccagctatat tccaagcggt 300  
ttggtgtgtt cttgtcagaa gttagtgaat ataaacttag ggaaattagt 350  
ttgaaccatg agtggacatt tgaaaaactc aggcagcaca tttcacgcaa 400  
cgcccaggac aagcaggagt tgcattctgt catgctgtcg ggggtgcccc 450  
atgctgtctt tgacctcaca gacctggatg tgctaaagct tgaactaatt 500  
ccagaagcta aaattcctgc taagatttct caaatgacta acctccaaga 550  
gtccacctc tgccactgcc ctgcaaaagt tgaacagact gcttttagct 600  
ttcttcgcga tcacttgaga tgccttcacg tgaagttcac tgatgtggct 650  
gaaattcctg cctgggtgta ttgctcaaa aaccttcgag agttgtactt 700  
aataggcaat ttgaactctg aaaacaataa gatgatagga cttgaatctc 750  
tccgagagtt gcggcacctt aagattctcc acgtgaagag caatttgacc 800  
aaagttccct ccaacattac agatgtggct ccacatctta caaagttagt 850  
cattcataat gacggcacta aactcttggt actgaacagc cttagaataa 900  
tgatgaatgt cgctgagctg gaactccaga actgtgagct agagagaatc 950  
ccacatgcta ttttcagcct ctctaattta caggaactgg atttaaagtc 1000  
caataacatt cgcacaattg aggaaatcat cagtttccag ctttaaaaac 1050  
gactgacttg tttaaaatta tggcataaca aaattgttac tattcctccc 1100  
tctattacc atgtcaaaaa cttggagtca ctttatttct ctaacaacaa 1150  
gctcgaatcc ttaccagtgg cagtatttag ttacagaaa ctcatagct 1200  
tagatgtgag ctacaacaac atttcaatga ttccaataga aataggattg 1250  
cttcagaacc tgcagcattt gcatatcact gggaacaaag tggacattct 1300  
gccaaaacaa ttgtttaaat gcataaagtt gaggactttg aatctgggac 1350  
agaactgcat cacctcactc ccagagaaag ttggtcagct ctcccagctc 1400  
actcagctgg agctgaaggg gaactgcttg gaccgcctgc cagcccagct 1450  
gggccagtgt cggatgtcga agaaaagcgg gcttggtgtg gaagatcacc 1500  
tttttgatac cctgccactc gaagtcaaag aggcattgaa tcaagacata 1550  
aatattccct ttgcaaattg gatttaaact aagataatat atgcacagtg 1600  
atgtgcagga acaacttcct agattgcaag tgctcacgta caagttatta 1650  
caagataatg ctttttagga gtagatacat cttttaaaat aaaacagaga 1700  
ggatgcatag aaggctgata gaagacataa ctgaatgttc aatgtttgta 1750  
gggttttaag tcattcattt ccaaatcatt ttttttttct ttttggggaa 1800

P1618P2C2 sequence listing.txt

aggggaaggaa aaattataat cactaatctt ggttcttttt aaattgtttg 1850  
 taacttggat gctgccgcta ctgaatgttt acaaattgct tgcctgctaa 1900  
 agtaaataatg taaattgaca ttttcttact aaaaaaaaaa aaaaaaa 1947

<210> 185  
 <211> 501  
 <212> PRT  
 <213> Homo Sapien

<400> 185  
 Met Ala Tyr Met Leu Lys Lys Leu Leu Ile Ser Tyr Ile Ser Ile  
 1 5 10 15  
 Ile Cys Val Tyr Gly Phe Ile Cys Leu Tyr Thr Leu Phe Trp Leu  
 20 25 30  
 Phe Arg Ile Pro Leu Lys Glu Tyr Ser Phe Glu Lys Val Arg Glu  
 35 40 45  
 Glu Ser Ser Phe Ser Asp Ile Pro Asp Val Lys Asn Asp Phe Ala  
 50 55 60  
 Phe Leu Leu His Met Val Asp Gln Tyr Asp Gln Leu Tyr Ser Lys  
 65 70 75  
 Arg Phe Gly Val Phe Leu Ser Glu Val Ser Glu Asn Lys Leu Arg  
 80 85 90  
 Glu Ile Ser Leu Asn His Glu Trp Thr Phe Glu Lys Leu Arg Gln  
 95 100 105  
 His Ile Ser Arg Asn Ala Gln Asp Lys Gln Glu Leu His Leu Phe  
 110 115 120  
 Met Leu Ser Gly Val Pro Asp Ala Val Phe Asp Leu Thr Asp Leu  
 125 130 135  
 Asp Val Leu Lys Leu Glu Leu Ile Pro Glu Ala Lys Ile Pro Ala  
 140 145 150  
 Lys Ile Ser Gln Met Thr Asn Leu Gln Glu Leu His Leu Cys His  
 155 160 165  
 Cys Pro Ala Lys Val Glu Gln Thr Ala Phe Ser Phe Leu Arg Asp  
 170 175 180  
 His Leu Arg Cys Leu His Val Lys Phe Thr Asp Val Ala Glu Ile  
 185 190 195  
 Pro Ala Trp Val Tyr Leu Leu Lys Asn Leu Arg Glu Leu Tyr Leu  
 200 205 210  
 Ile Gly Asn Leu Asn Ser Glu Asn Asn Lys Met Ile Gly Leu Glu  
 215 220 225  
 Ser Leu Arg Glu Leu Arg His Leu Lys Ile Leu His Val Lys Ser  
 230 235 240  
 Asn Leu Thr Lys Val Pro Ser Asn Ile Thr Asp Val Ala Pro His  
 245 250 255

P1618P2C2 sequence listing.txt

Leu Thr Lys Leu Val Ile His Asn Asp Gly Thr Lys Leu Leu Val  
260 265 270

Leu Asn Ser Leu Lys Lys Met Met Asn Val Ala Glu Leu Glu Leu  
275 280 285

Gln Asn Cys Glu Leu Glu Arg Ile Pro His Ala Ile Phe Ser Leu  
290 295 300

Ser Asn Leu Gln Glu Leu Asp Leu Lys Ser Asn Asn Ile Arg Thr  
305 310 315

Ile Glu Glu Ile Ile Ser Phe Gln His Leu Lys Arg Leu Thr Cys  
320 325 330

Leu Lys Leu Trp His Asn Lys Ile Val Thr Ile Pro Pro Ser Ile  
335 340 345

Thr His Val Lys Asn Leu Glu Ser Leu Tyr Phe Ser Asn Asn Lys  
350 355 360

Leu Glu Ser Leu Pro Val Ala Val Phe Ser Leu Gln Lys Leu Arg  
365 370 375

Cys Leu Asp Val Ser Tyr Asn Asn Ile Ser Met Ile Pro Ile Glu  
380 385 390

Ile Gly Leu Leu Gln Asn Leu Gln His Leu His Ile Thr Gly Asn  
395 400 405

Lys Val Asp Ile Leu Pro Lys Gln Leu Phe Lys Cys Ile Lys Leu  
410 415 420

Arg Thr Leu Asn Leu Gly Gln Asn Cys Ile Thr Ser Leu Pro Glu  
425 430 435

Lys Val Gly Gln Leu Ser Gln Leu Thr Gln Leu Glu Leu Lys Gly  
440 445 450

Asn Cys Leu Asp Arg Leu Pro Ala Gln Leu Gly Gln Cys Arg Met  
455 460 465

Leu Lys Lys Ser Gly Leu Val Val Glu Asp His Leu Phe Asp Thr  
470 475 480

Leu Pro Leu Glu Val Lys Glu Ala Leu Asn Gln Asp Ile Asn Ile  
485 490 495

Pro Phe Ala Asn Gly Ile  
500

<210> 186

<211> 21

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic Oligonucleotide Probe

<400> 186

cctccctcta ttacccatgt c 21

P1618P2C2 sequence listing.txt

<210> 187  
 <211> 24  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Synthetic Oligonucleotide Probe

<400> 187  
 gaccaacttt ctctgggagt gagg 24

<210> 188  
 <211> 47  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Synthetic Oligonucleotide Probe

<400> 188  
 gtcactttat ttctctaaca acaagctcga atccttacca gtggcag 47

<210> 189  
 <211> 2917  
 <212> DNA  
 <213> Homo Sapien

<400> 189  
 cccacgcgtc cggccttctc tctggacttt gcatttccat tccttttcat 50  
 tgacaaactg acttttttta tttctttttt tccatctctg ggccagcttg 100  
 ggatcctagg ccgccctggg aagacatttg tgttttacac acataaggat 150  
 ctgtgttttg ggtttcttct tcctcccctg acattggcat tgcttagtgg 200  
 ttgtgtgggg agggagacca cgtgggctca gtgcttgctt gcacttatct 250  
 gcctaggtag atcgaagtct tttagcctcc atacagtgat tatgcctgtc 300  
 atcgtctggtg gtatcctggc ggccttgctc ctgctgatag ttgtcgtgct 350  
 ctgtctttac ttcaaaatac acaacgcgct aaaagctgca aaggaacctg 400  
 aagctgtggc tgtaaaaaat cacaaccag acaagggtgtg gtgggccaag 450  
 aacagccagg ccaaaacat tgccacggag tcttgtcctg ccctgcagtg 500  
 ctgtgaagga tatagaatgt gtgccagttt tgattccctg ccaccttgct 550  
 gttgcgacat aaatgagggc ctctgagtta ggaaaggctc ctttctcaa 600  
 gcagagccct gaagacttca atgatgtcaa tgaggccacc tgtttgtgat 650  
 gtgcaggcac agaagaaagg cacagctccc catcagtttc atggaaaata 700  
 actcagtgcc tgctgggaac cagctgctgg agatccctac agagagcttc 750  
 cactgggggc aacccttcca ggaaggagtt ggggagagag aaccctcact 800  
 gtggggaatg ctgataaacc agtcacacag ctgctctatt ctcacacaaa 850  
 tctacccctt gcgtggctgg aactgacgtt tccctggagg tgtccagaaa 900

P1618P2C2 sequence listing.txt

gctgatgtaa cacagagcct ataaaagctg tcggtcctta aggctgcca 950  
gcgcccttgcc aaaatggagc ttgtaagaag gctcatgcca ttgaccctct 1000  
taattctctc ctgtttggcg gagctgacaa tggcggaggc tgaaggcaat 1050  
gcaagctgca cagtcagtct aggggggtgcc aatatggcag agaccacaa 1100  
agccatgatc ctgcaactca atcccagtga gaactgcacc tggacaatag 1150  
aaagaccaga aaacaaaagc atcagaatta tcttttccta tgtccagctt 1200  
gatccagatg gaagctgtga aagtgaaaac attaaagtct ttgacggaac 1250  
ctccagcaat gggcctctgc tagggcaagt ctgcagtaaa aacgactatg 1300  
ttcctgtatt tgaatcatca tccagtacat tgacgtttca aatagttact 1350  
gactcagcaa gaattcaaag aactgtcttt gtcttctact acttcttctc 1400  
tcctaacatc tctattccaa actgtggcgg ttacctggat accttggag 1450  
gatccttcac cagccccaat tacccaaagc cgcacctga gctggcttat 1500  
tgtgtgtggc acatacaagt ggagaaagat tacaagataa aactaaactt 1550  
caaagagatt ttcctagaaa tagacaaaca gtgcaaattt gattttcttg 1600  
ccatctatga tggccctcc accaactctg gcctgattgg acaagtctgt 1650  
ggccgtgtga ctcccacctt cgaatcgtca tcaaactctc tgactgtcgt 1700  
gttgtctaca gattatgcca attcttaccg gggattttct gcttctaca 1750  
cctcaattta tgcagaaaac atcaacacta catctttaac ttgctcttct 1800  
gacaggatga gagttattat aagcaaatcc tacctagagg cttttaactc 1850  
taatgggaat aacttgcaac taaaagaccc aacttgcaga ccaaattat 1900  
caaatgttgt ggaattttct gtccctctta atggatgtgg tacaatcaga 1950  
aaggtagaag atcagtcaat tacttacacc aatataatca ccttttctgc 2000  
atcctcaact tctgaagtga tcacccgtca gaaacaactc cagattattg 2050  
tgaagtgtga aatgggacat aattctacag tggagataat atacataaca 2100  
gaagatgatg taatacaaag tcaaatgca ctgggcaaataaacaccag 2150  
catggctctt tttgaatcca attcatttga aaagactata cttgaatcac 2200  
catattatgt ggatttgaac caaactcttt ttgttcaagt tagtctgcac 2250  
acctcagatc caaatttggg ggtgtttctt gataacctga gagcctctcc 2300  
cacctctgac ttgcatctc caacctacga cctaataag agtggatgta 2350  
gtcgagatga aacttgaag gtgtatccct tatttggaca ctatgggaga 2400  
ttccagttta atgcctttta attcttgaga agtatgagct ctgtgtatct 2450



P1618P2C2 sequence listing.txt

gcagtgtaaa gttttgatat gtgatagcag tgaccaccag tctcgctgca 2500  
atcaagggttg tgtctccaga agcaaacgag acatttcttc atataaatgg 2550  
aaaacagatt ccatcatagg acccattcgt ctgaaaaggg atcgaagtgc 2600  
aagtggcaat tcaggatttc agcatgaaac acatgcggaa gaaactccaa 2650  
accagccttt caacagtgtg catctgtttt ccttcatggt tctagctctg 2700  
aatgtggtga ctgtagcgac aatcacagtg aggcattttg taaatcaacg 2750  
ggcagactac aaataccaga agctgcagaa ctattaacta acagggtccaa 2800  
ccctaagtga gacatgtttc tccaggatgc caaaggaaat gctacctcgt 2850  
ggctacacat attatgaata aatgaggaag ggcctgaaag tgacacacag 2900  
gcctgcatgt aaaaaaa 2917

<210> 190

<211> 607

<212> PRT

<213> Homo Sapien

<400> 190

Met Glu Leu Val Arg Arg Leu Met Pro Leu Thr Leu Leu Ile Leu  
1 5 10 15

Ser Cys Leu Ala Glu Leu Thr Met Ala Glu Ala Glu Gly Asn Ala  
20 25 30

Ser Cys Thr Val Ser Leu Gly Gly Ala Asn Met Ala Glu Thr His  
35 40 45

Lys Ala Met Ile Leu Gln Leu Asn Pro Ser Glu Asn Cys Thr Trp  
50 55 60

Thr Ile Glu Arg Pro Glu Asn Lys Ser Ile Arg Ile Ile Phe Ser  
65 70 75

Tyr Val Gln Leu Asp Pro Asp Gly Ser Cys Glu Ser Glu Asn Ile  
80 85 90

Lys Val Phe Asp Gly Thr Ser Ser Asn Gly Pro Leu Leu Gly Gln  
95 100 105

Val Cys Ser Lys Asn Asp Tyr Val Pro Val Phe Glu Ser Ser Ser  
110 115 120

Ser Thr Leu Thr Phe Gln Ile Val Thr Asp Ser Ala Arg Ile Gln  
125 130 135

Arg Thr Val Phe Val Phe Tyr Tyr Phe Phe Ser Pro Asn Ile Ser  
140 145 150

Ile Pro Asn Cys Gly Gly Tyr Leu Asp Thr Leu Glu Gly Ser Phe  
155 160 165

Thr Ser Pro Asn Tyr Pro Lys Pro His Pro Glu Leu Ala Tyr Cys  
170 175 180

Val Trp His Ile Gln Val Glu Lys Asp Tyr Lys Ile Lys Leu Asn  
185 190

P1618P2C2 sequence listing.txt

185		190	195
Phe Lys Glu Ile	Phe Leu Glu Ile Asp	Lys Gln Cys Lys Phe	Asp
200		205	210
Phe Leu Ala Ile	Tyr Asp Gly Pro Ser	Thr Asn Ser Gly Leu	Ile
215		220	225
Gly Gln Val Cys	Gly Arg Val Thr Pro	Thr Phe Glu Ser Ser	Ser
230		235	240
Asn Ser Leu Thr	Val Val Leu Ser Thr	Asp Tyr Ala Asn Ser	Tyr
245		250	255
Arg Gly Phe Ser	Ala Ser Tyr Thr Ser	Ile Tyr Ala Glu Asn	Ile
260		265	270
Asn Thr Thr Ser	Leu Thr Cys Ser Ser	Asp Arg Met Arg Val	Ile
275		280	285
Ile Ser Lys Ser	Tyr Leu Glu Ala Phe	Asn Ser Asn Gly Asn	Asn
290		295	300
Leu Gln Leu Lys	Asp Pro Thr Cys Arg	Pro Lys Leu Ser Asn	Val
305		310	315
Val Glu Phe Ser	Val Pro Leu Asn Gly	Cys Gly Thr Ile Arg	Lys
320		325	330
Val Glu Asp Gln	Ser Ile Thr Tyr Thr	Asn Ile Ile Thr Phe	Ser
335		340	345
Ala Ser Ser Thr	Ser Glu Val Ile Thr	Arg Gln Lys Gln Leu	Gln
350		355	360
Ile Ile Val Lys	Cys Glu Met Gly His	Asn Ser Thr Val Glu	Ile
365		370	375
Ile Tyr Ile Thr	Glu Asp Asp Val Ile	Gln Ser Gln Asn Ala	Leu
380		385	390
Gly Lys Tyr Asn	Thr Ser Met Ala Leu	Phe Glu Ser Asn Ser	Phe
395		400	405
Glu Lys Thr Ile	Leu Glu Ser Pro Tyr	Tyr Val Asp Leu Asn	Gln
410		415	420
Thr Leu Phe Val	Gln Val Ser Leu His	Thr Ser Asp Pro Asn	Leu
425		430	435
Val Val Phe Leu	Asp Thr Cys Arg Ala	Ser Pro Thr Ser Asp	Phe
440		445	450
Ala Ser Pro Thr	Tyr Asp Leu Ile Lys	Ser Gly Cys Ser Arg	Asp
455		460	465
Glu Thr Cys Lys	Val Tyr Pro Leu Phe	Gly His Tyr Gly Arg	Phe
470		475	480
Gln Phe Asn Ala	Phe Lys Phe Leu Arg	Ser Met Ser Ser Val	Tyr
485		490	495
Leu Gln Cys Lys	Val Leu Ile Cys Asp	Ser Ser Asp His Gln	Ser

P1618P2C2 sequence listing.txt

500

505

510

Arg Cys Asn Gln Gly Cys Val Ser Arg Ser Lys Arg Asp Ile Ser  
515 520 525  
Ser Tyr Lys Trp Lys Thr Asp Ser Ile Ile Gly Pro Ile Arg Leu  
530 535 540  
Lys Arg Asp Arg Ser Ala Ser Gly Asn Ser Gly Phe Gln His Glu  
545 550 555  
Thr His Ala Glu Glu Thr Pro Asn Gln Pro Phe Asn Ser Val His  
560 565 570  
Leu Phe Ser Phe Met Val Leu Ala Leu Asn Val Val Thr Val Ala  
575 580 585  
Thr Ile Thr Val Arg His Phe Val Asn Gln Arg Ala Asp Tyr Lys  
590 595 600  
Tyr Gln Lys Leu Gln Asn Tyr  
605

<210> 191

<211> 21

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic Oligonucleotide Probe

<400> 191

tctctattcc aaactgtggc g 21

<210> 192

<211> 22

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic Oligonucleotide Probe

<400> 192

tttgatgacg attcgaaggt gg 22

<210> 193

<211> 47

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic Oligonucleotide Probe

<400> 193

ggaaggatcc ttcaccagcc ccaattaccc aaagccgcat cctgagc 47

<210> 194

<211> 2362

<212> DNA

<213> Homo Sapien

<400> 194

gacggaagaa cagcgctccc gaggccgcgg gagcctgcag agaggacagc 50

P1618P2C2 sequence listing.txt

cggcctgcgc cgggacatgc ggccccagga gctccccagg ctgcggttcc 100  
 cgttgctgct gttgctgttg ctgctgctgc cgccgccgcc gtgccctgcc 150  
 cacagcgcca cgcgcttcga cccacactgg gagtccttgg acgcccgcca 200  
 gctgcccgcg tggtttgacc aggccaagtt cggcatcttc atccactggg 250  
 gagtgttttc cgtgcccagc ttcggtagcg agtggttctg gtggtattgg 300  
 caaaaggaaa agataccgaa gtatgtggaa tttatgaaag ataattaccc 350  
 tcctagtttc aaatatgaag attttgacc actatttaca gcaaaatttt 400  
 ttaatgcca ccagtgggca gatatttttc aggcctcttg tgccaaatac 450  
 attgtcttaa cttccaaaca tcatgaaggc tttaccttgt gggggtcaga 500  
 atattcgtgg aactggaatg ccatagatga ggggcccaag agggacattg 550  
 tcaaggaact tgaggtagcc attaggaaca gaactgacct gcgttttgga 600  
 ctgtactatt ccctttttga atggtttcat ccgctcttcc ttgaggatga 650  
 atccagtcca ttccataagc ggcaatttcc agtttctaag acattgccag 700  
 agctctatga gttagtgaac aactatcagc ctgaggttct gtggtcggat 750  
 ggtgacggag gagcaccgga tcaatactgg aacagcacag gcttcttggc 800  
 ctggttatat aatgaaagcc cagttcgggg cacagtagtc accaatgac 850  
 gttggggagc tggtagcatc tgtaagcatg gtggcttcta tacctgcagt 900  
 gatcggtata acccaggaca tcttttgcca cataaatggg aaaactgcat 950  
 gacaatagac aaactgtcct ggggctatag gagggaagct ggaatctctg 1000  
 actatcttac aattgaagaa ttggtgaagc aacttgtaga gacagtttca 1050  
 tgtggaggaa atcttttgat gaatattggg cccacactag atggcaccat 1100  
 ttctgtagtt tttagaggagc gactgaggca agtgggggtcc tggctaaaag 1150  
 tcaatggaga agctatttat gaaacctata cctggcgatc ccagaatgac 1200  
 actgtcacc cagatgtgtg gtacacatcc aagcctaaag aaaaattagt 1250  
 ctatgccatt tttcttaa at ggccacatc aggacagctg ttccttggcc 1300  
 atcccaaagc tattctgggg gcaacagagg tgaaactact gggccatgga 1350  
 cagccactta actggatttc tttggagcaa aatggcatta tggtagaact 1400  
 gccacagcta accattcatc agatgccgtg taaatggggc tgggctctag 1450  
 ccctaactaa tgtgatctaa agtgcagcag agtggtgat gctgcaagtt 1500  
 atgtctaagg ctaggaacta tcaggtgtct ataattgtag cacatggaga 1550  
 aagcaatgta aactggataa gaaaattatt tggcagttca gccctttccc 1600

P1618P2C2 sequence listing.txt

tttttccac taaatttttc ttaaattacc catgtaacca ttttaactct 1650  
 ccagtgcact ttgccattaa agtctcttca cattgatttg tttccatgtg 1700  
 tgactcagag gtgagaattt tttcacatta tagtagcaag gaattggtgg 1750  
 tattatggac cgaactgaaa attttatgtt gaagccatat ccccatgat 1800  
 tatatagtta tgcattcactt aatatgggga ttttttctgg gaaatgcatt 1850  
 gctagtcaat ttttttttgt gccaacatca tagagtgtat ttacaaaatc 1900  
 ctagatggca tagcctacta cacaccta atgtatggta tagactgttg 1950  
 ctcttaggct acagacatat acagcatgtt actgaatact gtaggcaata 2000  
 gtaacagtgg tatttgtata tcgaaacata tggaaacata gagaaggtag 2050  
 agtaaaaata ctgtaaaata aatggtgcac ctgtataggg cacttaccac 2100  
 gaatggagct tacaggactg gaagttgctc tgggtgagtc agtgagtga 2150  
 tgtgaaggcc taggacatta ttgaacactg ccagacgtta taaatactgt 2200  
 atgcttaggc tacactacat ttataaaaaa aagtttttct ttcttcaatt 2250  
 ataaattaac ataagtgtac tgtaacttta caaacgtttt aatttttaaa 2300  
 accttttgg ctcttttgta ataacactta gcttaaaaca taaactcatt 2350  
 gtgcaaatgt aa 2362

<210> 195  
 <211> 467  
 <212> PRT  
 <213> Homo Sapien

<400> 195  
 Met Arg Pro Gln Glu Leu Pro Arg Leu Ala Phe Pro Leu Leu Leu  
 1 5 10 15  
 Leu Leu Leu Leu Leu Leu Pro Pro Pro Pro Cys Pro Ala His Ser  
 20 25 30  
 Ala Thr Arg Phe Asp Pro Thr Trp Glu Ser Leu Asp Ala Arg Gln  
 35 40 45  
 Leu Pro Ala Trp Phe Asp Gln Ala Lys Phe Gly Ile Phe Ile His  
 50 55 60  
 Trp Gly Val Phe Ser Val Pro Ser Phe Gly Ser Glu Trp Phe Trp  
 65 70 75  
 Trp Tyr Trp Gln Lys Glu Lys Ile Pro Lys Tyr Val Glu Phe Met  
 80 85 90  
 Lys Asp Asn Tyr Pro Pro Ser Phe Lys Tyr Glu Asp Phe Gly Pro  
 95 100 105  
 Leu Phe Thr Ala Lys Phe Phe Asn Ala Asn Gln Trp Ala Asp Ile  
 110 115 120  
 Phe Gln Ala Ser Gly Ala Lys Tyr Ile Val Leu Thr Ser Lys His  
 Page 125

P1618P2C2 sequence listing.txt

125	130	135
His Glu Gly Phe Thr	Leu Trp Gly Ser Glu Tyr Ser Trp Asn Trp	
140	145	150
Asn Ala Ile Asp Glu	Gly Pro Lys Arg Asp Ile Val Lys Glu Leu	
155	160	165
Glu Val Ala Ile Arg	Asn Arg Thr Asp Leu Arg Phe Gly Leu Tyr	
170	175	180
Tyr Ser Leu Phe Glu	Trp Phe His Pro Leu Phe Leu Glu Asp Glu	
185	190	195
Ser Ser Ser Phe His	Lys Arg Gln Phe Pro Val Ser Lys Thr Leu	
200	205	210
Pro Glu Leu Tyr Glu	Leu Val Asn Asn Tyr Gln Pro Glu Val Leu	
215	220	225
Trp Ser Asp Gly Asp	Gly Gly Ala Pro Asp Gln Tyr Trp Asn Ser	
230	235	240
Thr Gly Phe Leu Ala	Trp Leu Tyr Asn Glu Ser Pro Val Arg Gly	
245	250	255
Thr Val Val Thr Asn	Asp Arg Trp Gly Ala Gly Ser Ile Cys Lys	
260	265	270
His Gly Gly Phe Tyr	Thr Cys Ser Asp Arg Tyr Asn Pro Gly His	
275	280	285
Leu Leu Pro His Lys	Trp Glu Asn Cys Met Thr Ile Asp Lys Leu	
290	295	300
Ser Trp Gly Tyr Arg	Arg Glu Ala Gly Ile Ser Asp Tyr Leu Thr	
305	310	315
Ile Glu Glu Leu Val	Lys Gln Leu Val Glu Thr Val Ser Cys Gly	
320	325	330
Gly Asn Leu Leu Met	Asn Ile Gly Pro Thr Leu Asp Gly Thr Ile	
335	340	345
Ser Val Val Phe Glu	Glu Arg Leu Arg Gln Val Gly Ser Trp Leu	
350	355	360
Lys Val Asn Gly Glu	Ala Ile Tyr Glu Thr Tyr Thr Trp Arg Ser	
365	370	375
Gln Asn Asp Thr Val	Thr Pro Asp Val Trp Tyr Thr Ser Lys Pro	
380	385	390
Lys Glu Lys Leu Val	Tyr Ala Ile Phe Leu Lys Trp Pro Thr Ser	
395	400	405
Gly Gln Leu Phe Leu	Gly His Pro Lys Ala Ile Leu Gly Ala Thr	
410	415	420
Glu Val Lys Leu Leu	Gly His Gly Gln Pro Leu Asn Trp Ile Ser	
425	430	435
Leu Glu Gln Asn Gly	Ile Met Val Glu Leu Pro Gln Leu Thr Ile	

440

445

450

His Gln Met Pro Cys Lys Trp Gly Trp Ala Leu Ala Leu Thr Asn  
455 460 465

Val Ile

<210> 196

<211> 23

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic Oligonucleotide Probe

<400> 196

tggtttgacc aggccaagtt cgg 23

<210> 197

<211> 24

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic Oligonucleotide Probe

<400> 197

ggattcatcc tcaaggaaga gcgg 24

<210> 198

<211> 24

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic Oligonucleotide Probe

<400> 198

aacttgacgc atcagccact ctgc 24

<210> 199

<211> 45

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic Oligonucleotide Probe

<400> 199

ttccgtgccc agcttcggtg gcgagtgggt ctggtggtat tggca 45

<210> 200

<211> 2372

<212> DNA

<213> Homo Sapien

<400> 200

agcagggaaa tccggatgtc tcggttatga agtggagcag tgagtgtgag 50

cctcaacata gttccagaac tctccatccg gactagttat tgagcatctg 100

cctctcatat caccagtggc catctgaggt gtttcctgg ctctgaaggg 150

P1618P2C2 sequence listing.txt

gtaggcacga tggccaggtg cttcagcctg gtgttgcttc tcacttccat 200  
 ctggaccacg aggctcctgg tccaaggctc tttgcgtgca gaagagcttt 250  
 ccatccaggt gtcatgcaga attatgggga tcacccttgt gagcaaaaag 300  
 gcgaaccagc agctgaattt cacagaagct aaggaggcct gtaggctgct 350  
 gggactaagt ttggccggca aggaccaagt tgaaacagcc ttgaaagcta 400  
 gctttgaaac ttgcagctat ggctgggttg gagatggatt cgtggtcac 450  
 tctaggatta gccc aaaccc caagtgtggg aaaaatgggg tgggtgtcct 500  
 gat ttggaag gttccagtga gccgacagtt tgcagcctat tgttacaact 550  
 catctgatac ttggactaac tcgtgcattc cagaaattat caccaccaa 600  
 gatcccatat tcaacactca aactgcaaca caaacaacag aatttattgt 650  
 cagtgcagct acctactcgg tggcatcccc ttactctaca atacctgccc 700  
 ctactactac tcctcctgct ccagcttcca cttctattcc acggagaaaa 750  
 aaattgattt gtgtcacaga agtttttatg gaaactagca ccatgtctac 800  
 agaaactgaa ccatttggtg aaaataaagc agcattcaag aatgaagctg 850  
 ctgggttttg aggtgtcccc acggctctgc tagtgcttgc tctcctcttc 900  
 tttggtgctg cagctggtct tggattttgc tatgtcaaaa ggtatgtgaa 950  
 ggccttcctt ttacaaaca agaatcagca gaaggaaatg atcgaaacca 1000  
 aagtagtaaa ggaggagaag gccaatgata gcaaccctaa tgaggaaatca 1050  
 aagaaaactg ataaaaaccc agaagagtcc aagagtccaa gcaaaaactac 1100  
 cgtgcgatgc ctggaagctg aagtttagat gagacagaaa tgaggagaca 1150  
 cacctgagggc tggtttcttt catgctcctt accctgcccc agctggggaa 1200  
 atcaaaaggg ccaaagaacc aaagaagaaa gtccaccctt ggttcctaac 1250  
 tggaatcagc tcaggactgc cattggacta tggagtgcac caaagagaat 1300  
 gcccttctcc ttattgtaac cctgtctgga tcctatctc ctacctcaa 1350  
 agcttccac ggcctttcta gcctggctat gtcctaataa tatccactg 1400  
 ggagaaagga gttttgcaaa gtgcaaggac ctaaaacatc tcatcagtat 1450  
 ccagtggtaa aaaggcctcc tggctgtctg aggctaggtg ggttgaaagc 1500  
 caaggagtca ctgagaccaa ggctttctct actgattccg cagctcagac 1550  
 cctttcttca gctctgaaag agaaacacgt atcccacctg acatgtcctt 1600  
 ctgagccccg taagagcaaa agaatggcag aaaagtttag cccctgaaag 1650  
 ccatggagat tctcataact tgagacctaa tctctgtaa gctaaaataa 1700



P1618P2C2 sequence listing.txt

agaaatagaa caaggctgag gatacgacag tacactgtca gcagggactg 1750  
 taaacacaga caggggtcaaa gtgttttctc tgaacacatt gagttggaat 1800  
 cactgttttag aacacacaca cttacttttt ctggtctcta ccactgctga 1850  
 ttttttctct aggaaatata cttttacaag taacaaaaat aaaaactctt 1900  
 ataaatttct atttttatct gagttacaga aatgattact aaggaagatt 1950  
 actcagtaat ttgttttaaaa agtaataaaa ttcaacaaac atttgctgaa 2000  
 tagctactat atgtcaagtg ctgtgcaagg tattacactc tgtaattgaa 2050  
 tattattcct caaaaaattg cacatagtag aacgctatct gggaagctat 2100  
 ttttttcagt tttgatattt ctagcttatt tactttccaa ctaattttta 2150  
 tttttgctga gactaatctt attcattttc tctaatatgg caaccattat 2200  
 aaccttaatt tattattaac atacctaaga agtacattgt tacctctata 2250  
 taccaaagca catttttaaaa gtgccattaa caaatgtatc actagccctc 2300  
 ctttttccaa caagaaggga ctgagagatg cagaaatatt tgtgacaaaa 2350  
 aattaaagca tttagaaaac tt 2372

<210> 201  
 <211> 322  
 <212> PRT  
 <213> Homo Sapien

<400> 201  
 Met Ala Arg Cys Phe Ser Leu Val Leu Leu Leu Thr Ser Ile Trp  
 1 5 10 15  
 Thr Thr Arg Leu Leu Val Gln Gly Ser Leu Arg Ala Glu Glu Leu  
 20 25 30  
 Ser Ile Gln Val Ser Cys Arg Ile Met Gly Ile Thr Leu Val Ser  
 35 40 45  
 Lys Lys Ala Asn Gln Gln Leu Asn Phe Thr Glu Ala Lys Glu Ala  
 50 55 60  
 Cys Arg Leu Leu Gly Leu Ser Leu Ala Gly Lys Asp Gln Val Glu  
 65 70 75  
 Thr Ala Leu Lys Ala Ser Phe Glu Thr Cys Ser Tyr Gly Trp Val  
 80 85 90  
 Gly Asp Gly Phe Val Val Ile Ser Arg Ile Ser Pro Asn Pro Lys  
 95 100 105  
 Cys Gly Lys Asn Gly Val Gly Val Leu Ile Trp Lys Val Pro Val  
 110 115 120  
 Ser Arg Gln Phe Ala Ala Tyr Cys Tyr Asn Ser Ser Asp Thr Trp  
 125 130 135  
 Thr Asn Ser Cys Ile Pro Glu Ile Ile Thr Thr Lys Asp Pro Ile  
 140 145 150

P1618P2C2 sequence listing.txt

Phe Asn Thr Gln Thr Ala Thr Gln Thr Thr Glu Phe Ile Val Ser  
155 160 165

Asp Ser Thr Tyr Ser Val Ala Ser Pro Tyr Ser Thr Ile Pro Ala  
170 175 180

Pro Thr Thr Thr Pro Pro Ala Pro Ala Ser Thr Ser Ile Pro Arg  
185 190 195

Arg Lys Lys Leu Ile Cys Val Thr Glu Val Phe Met Glu Thr Ser  
200 205 210

Thr Met Ser Thr Glu Thr Glu Pro Phe Val Glu Asn Lys Ala Ala  
215 220 225

Phe Lys Asn Glu Ala Ala Gly Phe Gly Gly Val Pro Thr Ala Leu  
230 235 240

Leu Val Leu Ala Leu Leu Phe Phe Gly Ala Ala Ala Gly Leu Gly  
245 250 255

Phe Cys Tyr Val Lys Arg Tyr Val Lys Ala Phe Pro Phe Thr Asn  
260 265 270

Lys Asn Gln Gln Lys Glu Met Ile Glu Thr Lys Val Val Lys Glu  
275 280 285

Glu Lys Ala Asn Asp Ser Asn Pro Asn Glu Glu Ser Lys Lys Thr  
290 295 300

Asp Lys Asn Pro Glu Glu Ser Lys Ser Pro Ser Lys Thr Thr Val  
305 310 315

Arg Cys Leu Glu Ala Glu Val  
320

<210> 202  
<211> 24  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Synthetic Oligonucleotide Probe

<400> 202  
gagctttcca tccaggtgtc atgc 24

<210> 203  
<211> 22  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Synthetic Oligonucleotide Probe

<400> 203  
gtcagtgaca gtacctactc gg 22

<210> 204  
<211> 24  
<212> DNA  
<213> Artificial Sequence

P1618P2C2 sequence listing.txt

<220>  
<223> Synthetic Oligonucleotide Probe

<400> 204  
tggagcagga ggagtagtag tagg 24

<210> 205  
<211> 50  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Synthetic Oligonucleotide Probe

<400> 205  
aggaggcctg taggctgctg ggactaagtt tggccggcaa ggaccaagtt 50

<210> 206  
<211> 1620  
<212> DNA  
<213> Homo Sapien

<220>  
<221> unsure  
<222> 973, 977, 996, 1003  
<223> unknown base

<400> 206  
agatggcggg cttggcacct ctaattgctc tcgtgtattc ggtgccgcga 50  
ctttcacgat ggctcgccca accttactac cttctgtcgg ccctgctctc 100  
tgctgccttc ctactcgtga ggaaactgcc gccgctctgc cacggtctgc 150  
ccaccaacg cgaagacggg aaccctgtg actttgactg gagagaagtg 200  
gagatcctga tgtttctcag tgccattgtg atgatgaaga accgcagatc 250  
catcactgtg gagcaacata taggcaacat tttcatgttt agtaaagtgg 300  
ccaacacaat tcttttcttc cgcttgata ttcgcatggg cctactttac 350  
atcacactct gcatagtgtt cctgatgacg tgcaaacccc ccctatatat 400  
gggccctgag tatatcaagt acttcaatga taaaaccatt gatgaggaac 450  
tagaacggga caagaggggc acttggattg tggagttctt tgccaattgg 500  
tctaattgact gccaatcatt tgcccctatc tatgctgacc tctcccttaa 550  
atacaactgt acagggctaa attttgaggaa ggtggatgtt ggacgctata 600  
ctgatgttag tacgcggtac aaagttagca catcacccct caccaagcaa 650  
ctccctaccc tgatcctgtt ccaaggtggc aaggaggcaa tgcggcggcc 700  
acagattgac aagaaaggac gggctgtctc atggaccttc tctgaggaga 750  
atgtgatccg agaatttaac ttaaatgagc tataccagcg ggccaagaaa 800  
ctatcaaagg ctggagacaa tatccctgag gagcagcctg tggcttcaac 850

P1618P2C2 sequence listing.txt

ccccaccaca gtgtcagatg gggaaaacaa gaaggataaa taagatcctc 900  
actttggcag tgcttcctct cctgtcaatt ccaggctctt tccataacca 950  
caagcctgag gctgcagcct ttnattnatg ttttcctttt ggctgngact 1000  
ggntggggca gcatgcagct tctgatttta aagaggcatc tagggaattg 1050  
tcaggcaccc tacaggaagg cctgccatgc tgtggccaac tgtttactg 1100  
gagcaagaaa gagatctcat aggacggagg gggaaatggt ttccctccaa 1150  
gcttgggtca gtgtgttaac tgcttatcag ctattcagac atctccatgg 1200  
ttttccatg aaactctgtg gtttcatcat tccttcttag ttgacctgca 1250  
cagcttggtt agacctagat ttaaccctaa ggtaagatgc tggggtatag 1300  
aacgctaaga attttcccc aaggactctt gcttccttaa gcccttctgg 1350  
cttcgtttat ggtcttcatt aaaagtataa gcctaacttt gtcgctagtc 1400  
ctaaggagaa acctttaacc acaaagtttt tatcattgaa gacaatattg 1450  
aacaaccccc tattttgtgg ggattgagaa ggggtgaata gaggcttgag 1500  
actttccttt gtgtggtagg acttggagga gaaatcccct ggactttcac 1550  
taacctctg acatactccc cacaccagt tgatggcttt ccgtaataaa 1600  
aagattggga tttccttttg 1620

<210> 207  
<211> 296  
<212> PRT  
<213> Homo Sapien

<400> 207  
Met Ala Val Leu Ala Pro Leu Ile Ala Leu Val Tyr Ser Val Pro  
1 5 10 15  
Arg Leu Ser Arg Trp Leu Ala Gln Pro Tyr Tyr Leu Leu Ser Ala  
20 25 30  
Leu Leu Ser Ala Ala Phe Leu Leu Val Arg Lys Leu Pro Pro Leu  
35 40 45  
Cys His Gly Leu Pro Thr Gln Arg Glu Asp Gly Asn Pro Cys Asp  
50 55 60  
Phe Asp Trp Arg Glu Val Glu Ile Leu Met Phe Leu Ser Ala Ile  
65 70 75  
Val Met Met Lys Asn Arg Arg Ser Ile Thr Val Glu Gln His Ile  
80 85 90  
Gly Asn Ile Phe Met Phe Ser Lys Val Ala Asn Thr Ile Leu Phe  
95 100 105  
Phe Arg Leu Asp Ile Arg Met Gly Leu Leu Tyr Ile Thr Leu Cys  
110 115 120  
Ile Val Phe Leu Met Thr Cys Lys Pro Pro Leu Tyr Met Gly Pro

P1618P2C2 sequence listing.txt

125		130		135
Glu Tyr Ile Lys	Tyr Phe Asn Asp Lys	Thr Ile Asp Glu Glu	Leu	
	140	145	150	
Glu Arg Asp Lys	Arg Val Thr Trp Ile	Val Glu Phe Phe Ala	Asn	
	155	160	165	
Trp Ser Asn Asp	Cys Gln Ser Phe Ala	Pro Ile Tyr Ala Asp	Leu	
	170	175	180	
Ser Leu Lys Tyr	Asn Cys Thr Gly Leu	Asn Phe Gly Lys Val	Asp	
	185	190	195	
Val Gly Arg Tyr	Thr Asp Val Ser Thr	Arg Tyr Lys Val Ser	Thr	
	200	205	210	
Ser Pro Leu Thr	Lys Gln Leu Pro Thr	Leu Ile Leu Phe Gln	Gly	
	215	220	225	
Gly Lys Glu Ala	Met Arg Arg Pro Gln	Ile Asp Lys Lys Gly	Arg	
	230	235	240	
Ala Val Ser Trp	Thr Phe Ser Glu Glu	Asn Val Ile Arg Glu	Phe	
	245	250	255	
Asn Leu Asn Glu	Leu Tyr Gln Arg Ala	Lys Lys Leu Ser Lys	Ala	
	260	265	270	
Gly Asp Asn Ile	Pro Glu Glu Gln Pro	Val Ala Ser Thr Pro	Thr	
	275	280	285	
Thr Val Ser Asp	Gly Glu Asn Lys Lys	Asp Lys		
	290	295		

<210> 208

<211> 24

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic Oligonucleotide Probe

<400> 208

gcttggatat tcgcatgggc ctac 24

<210> 209

<211> 20

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic Oligonucleotide Probe

<400> 209

tggagacaat atccctgagg 20

<210> 210

<211> 24

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic Oligonucleotide Probe

<400> 210

aacagttggc cacagcatgg cagg 24

<210> 211

<211> 50

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic Oligonucleotide Probe

<400> 211

ccattgatga ggaactagaa cgggacaaga gggtcacttg gattgtggag 50

<210> 212

<211> 1985

<212> DNA

<213> Homo Sapien

<400> 212

ggacagctcg cggccccga gagctctagc cgctcaggag ctgcctgggg 50

acgtttgccc tggggcccca gcctggcccc ggtcaccctg gcatgaggag 100

atgggcctgt tgctcctggt cccattgctc ctgctgcccc gctcctacgg 150

actgcccttc tacaacgggt tctactactc caacagcgcc aacgaccaga 200

acctaggcaa cggtcatggc aaagacctcc ttaatggagt gaagctggtg 250

gtggagacac ccgaggagac cctgttcacc taccaagggg ccagtgtgat 300

cctgccctgc cgctaccgct acgagccggc cctggtctcc ccgcggcggtg 350

tgcgtgtcaa atggtggaag ctgtcggaga acggggcccc agagaaggac 400

gtgctggtgg ccatcgggct gaggcaccgc tcctttgggg actaccaagg 450

ccgcgtgcac ctgcggcagg acaaagagca tgacgtctcg ctggagatcc 500

aggatctgcg gctggaggac tatgggcggt accgctgtga ggtcattgac 550

gggctggagg atgaaagcgg tctggtggag ctggagctgc ggggtgtggt 600

ctttccttac cagtcccca acgggcgcta ccagttcaac ttccacgagg 650

gccagcaggt ctgtgcagag caggctgcgg tgggtggcctc ctttgagcag 700

ctcttcggg cctgggagga gggcctggac tggtgcaacg cgggctggct 750

gcaggatgct acggtgcagt accccatcat gttgccccgg cagccctgcg 800

gtggcccagg cctggcacct ggcgtgcgaa gctacggccc ccgccaccgc 850

cgctgcacc gctatgatgt attctgcttc gctactgccc tcaaggggcg 900

ggtgtactac ctggagcacc ctgagaagct gacgctgaca gaggcaaggg 950

aggcctgcca ggaagatgat gccacgatcg ccaagggtggg acagctcttt 1000

gccgcctgga agttccatgg cctggaccgc tgcgacgctg gctggctggc 1050

P1618P2C2 sequence listing.txt

agatggcagc gtccgctacc ctgtggttca cccgcatcct aactgtgggc 1100  
 ccccagagcc tgggggtccga agctttggct tccccgaccc gcagagccgc 1150  
 ttgtacggtg tttactgcta ccgccagcac taggacctgg ggccctcccc 1200  
 tgccgcattc cctcactggc tgtgtattta ttgagtgggt cgttttccct 1250  
 tgtgggttgg agccatttta actgttttta tactttctcaa tttaaatttt 1300  
 ctttaaacad ttttttacta ttttttgtaa agcaaacaga acccaatgcc 1350  
 tccctttgct cctggatgcc ccactccagg aatcatgctt gctcccctgg 1400  
 gccatttgcg gttttgtggg cttctggagg gttccccgcc atccaggctg 1450  
 gtctccctcc cttaaggagg ttggtgccca gagtgggcgg tggcctgtct 1500  
 agaatgccgc cgggagtccg ggcatggtgg gcacagttct ccctgcccct 1550  
 cagcctgggg gaagaagagg gcctcggggg cctccggagc tgggctttgg 1600  
 gcctctcctg cccacctcta cttctctgtg aagccgctga cccagctctg 1650  
 cccactgagg ggctagggct ggaagccagt tctaggcttc caggcgaaat 1700  
 ctgaggggaag gaagaaactc ccctccccgt tccccttccc ctctcggttc 1750  
 caaagaatct gttttgttgt catttgtttc tcctgtttcc ctgtgtgggg 1800  
 aggggccctc aggtgtgtgt actttggaca ataaatggtg ctatgactgc 1850  
 cttccgccaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 1900  
 aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 1950  
 aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaa 1985

<210> 213  
 <211> 360  
 <212> PRT  
 <213> Homo Sapien

<400> 213  
 Met Gly Leu Leu Leu Leu Val Pro Leu Leu Leu Leu Pro Gly Ser  
 1 5 10 15  
 Tyr Gly Leu Pro Phe Tyr Asn Gly Phe Tyr Tyr Ser Asn Ser Ala  
 20 25 30  
 Asn Asp Gln Asn Leu Gly Asn Gly His Gly Lys Asp Leu Leu Asn  
 35 40 45  
 Gly Val Lys Leu Val Val Glu Thr Pro Glu Glu Thr Leu Phe Thr  
 50 55 60  
 Tyr Gln Gly Ala Ser Val Ile Leu Pro Cys Arg Tyr Arg Tyr Glu  
 65 70 75  
 Pro Ala Leu Val Ser Pro Arg Arg Val Arg Val Lys Trp Trp Lys  
 80 85 90

P1618P2C2 sequence listing.txt

Leu Ser Glu Asn Gly	Ala Pro Glu Lys Asp Val Leu Val Ala Ile	95	100	105
Gly Leu Arg His Arg	Ser Phe Gly Asp Tyr Gln Gly Arg Val His	110	115	120
Leu Arg Gln Asp Lys	Glu His Asp Val Ser Leu Glu Ile Gln Asp	125	130	135
Leu Arg Leu Glu Asp	Tyr Gly Arg Tyr Arg Cys Glu Val Ile Asp	140	145	150
Gly Leu Glu Asp Glu	Ser Gly Leu Val Glu Leu Glu Leu Arg Gly	155	160	165
Val Val Phe Pro Tyr	Gln Ser Pro Asn Gly Arg Tyr Gln Phe Asn	170	175	180
Phe His Glu Gly Gln	Gln Val Cys Ala Glu Gln Ala Ala Val Val	185	190	195
Ala Ser Phe Glu Gln	Leu Phe Arg Ala Trp Glu Glu Gly Leu Asp	200	205	210
Trp Cys Asn Ala Gly	Trp Leu Gln Asp Ala Thr Val Gln Tyr Pro	215	220	225
Ile Met Leu Pro Arg	Gln Pro Cys Gly Gly Pro Gly Leu Ala Pro	230	235	240
Gly Val Arg Ser Tyr	Gly Pro Arg His Arg Arg Leu His Arg Tyr	245	250	255
Asp Val Phe Cys Phe	Ala Thr Ala Leu Lys Gly Arg Val Tyr Tyr	260	265	270
Leu Glu His Pro Glu	Lys Leu Thr Leu Thr Glu Ala Arg Glu Ala	275	280	285
Cys Gln Glu Asp Asp	Ala Thr Ile Ala Lys Val Gly Gln Leu Phe	290	295	300
Ala Ala Trp Lys Phe	His Gly Leu Asp Arg Cys Asp Ala Gly Trp	305	310	315
Leu Ala Asp Gly Ser	Val Arg Tyr Pro Val Val His Pro His Pro	320	325	330
Asn Cys Gly Pro Pro	Glu Pro Gly Val Arg Ser Phe Gly Phe Pro	335	340	345
Asp Pro Gln Ser Arg	Leu Tyr Gly Val Tyr Cys Tyr Arg Gln His	350	355	360

<210> 214

<211> 18

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic Oligonucleotide Probe

<400> 214



P1618P2C2 sequence listing.txt

tgcttcgcta ctgccctc 18

<210> 215  
<211> 18  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Synthetic Oligonucleotide Probe

<400> 215  
ttcccttggtg ggttggag 18

<210> 216  
<211> 18  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Synthetic Oligonucleotide Probe

<400> 216  
agggctggaa gccagttc 18

<210> 217  
<211> 18  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Synthetic Oligonucleotide Probe

<400> 217  
agccagtggag gaaatgcg 18

<210> 218  
<211> 24  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Synthetic Oligonucleotide Probe

<400> 218  
tgtccaaagt acacacacct gagg 24

<210> 219  
<211> 45  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Synthetic Oligonucleotide Probe

<400> 219  
gatgccacga tcgccaaggt gggacagctc ttgcccgcct ggaag 45

<210> 220  
<211> 1503  
<212> DNA  
<213> Homo Sapien

<400> 220

P1618P2C2 sequence listing.txt

```

ggagagcgga gcgaagctgg ataacagggg accgatgatg tggcgaccat 50
cagttctgct gcttctgttg ctactgaggc acgggggcca ggggaagcca 100
tccccagacg caggccctca tggccagggg aggggtgcacc aggcggcccc 150
cctgagcgac gctcccatg atgacgcca cggaacttc cagtacgacc 200
atgaggcttt cctgggacgg gaagtggcca aggaattcga ccaactcacc 250
ccagaggaaa gccaggcccg tctggggcgg atcgtggacc gcatggaccg 300
cgcgggggac ggcgacggct ggggtgtcgt ggccgagctt cgcgcggtga 350
tcgcgcacac gcagcagcgg cacatacggg actcggtgag cgcgccctgg 400
gacacgtacg acacggaccg cgacgggct gtgggttggg aggagctgcg 450
caacgccacc tatggccact acgcgcccgg tgaagaattt catgacgtgg 500
aggatgcaga gacctacaaa aagatgctgg ctccggacga gcggcgtttc 550
cgggtggccg accaggatgg ggactcgatg gccactcgag aggagctgac 600
agccttcctg caccgaggg agttccctca catgcgggac atcgtgattg 650
ctgaaaccct ggaggacctg gacagaaaca aagatggcta tgtccagggtg 700
gaggagtaca tcgcggatct gtactcagcc gagcctgggg aggaggagcc 750
ggcgtgggtg cagacggaga ggcagcagtt ccgggacttc cgggatctga 800
acaaggatgg gcacctggat gggagtgagg tgggccactg ggtgctgccc 850
cctgccagg accagcccct ggtggaagcc aaccacctgc tgcacgagag 900
cgacacggac aaggatgggc ggctgagcaa agcggaaatc ctgggtaatt 950
ggaacatgtt tgtgggcagt caggccacca actatggcga ggacctgacc 1000
cggcaccacg atgagctgtg agcaccgcgc acctgccaca gcctcagagg 1050
cccgcacat gaccggagga ggggccgtg tggcttgcc ccctccctgt 1100
ccaggccccg caggaggcag atgcagtccc aggcacctc ctgcccctgg 1150
gctctcaggg accccctggg tcggcttctg tccctgtcac accccaacc 1200
ccagggaggg gctgtcatag tcccagagga taagcaatac ctatttctga 1250
ctgagtctcc cagcccagac ccagggacct ttggcccaa gctcagctct 1300
aagaaccgcc ccaaccctc cagctccaaa tctgagcctc caccacatag 1350
actgaaactc ccctggcccc agccctctcc tgcctggcct ggctgggac 1400
acctcctctc tgccaggagg caataaaagc cagcgccggg acctgaaaa 1450
aaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 1500
aaa 1503

```

P1618P2C2 sequence listing.txt

<211> 328  
 <212> PRT  
 <213> Homo Sapien

<400> 221  
 Met Met Trp Arg Pro Ser Val Leu Leu Leu Leu Leu Leu Arg  
 1 5 10 15  
 His Gly Ala Gln Gly Lys Pro Ser Pro Asp Ala Gly Pro His Gly  
 20 25 30  
 Gln Gly Arg Val His Gln Ala Ala Pro Leu Ser Asp Ala Pro His  
 35 40 45  
 Asp Asp Ala His Gly Asn Phe Gln Tyr Asp His Glu Ala Phe Leu  
 50 55 60  
 Gly Arg Glu Val Ala Lys Glu Phe Asp Gln Leu Thr Pro Glu Glu  
 65 70 75  
 Ser Gln Ala Arg Leu Gly Arg Ile Val Asp Arg Met Asp Arg Ala  
 80 85 90  
 Gly Asp Gly Asp Gly Trp Val Ser Leu Ala Glu Leu Arg Ala Trp  
 95 100 105  
 Ile Ala His Thr Gln Gln Arg His Ile Arg Asp Ser Val Ser Ala  
 110 115 120  
 Ala Trp Asp Thr Tyr Asp Thr Asp Arg Asp Gly Arg Val Gly Trp  
 125 130 135  
 Glu Glu Leu Arg Asn Ala Thr Tyr Gly His Tyr Ala Pro Gly Glu  
 140 145 150  
 Glu Phe His Asp Val Glu Asp Ala Glu Thr Tyr Lys Lys Met Leu  
 155 160 165  
 Ala Arg Asp Glu Arg Arg Phe Arg Val Ala Asp Gln Asp Gly Asp  
 170 175 180  
 Ser Met Ala Thr Arg Glu Glu Leu Thr Ala Phe Leu His Pro Glu  
 185 190 195  
 Glu Phe Pro His Met Arg Asp Ile Val Ile Ala Glu Thr Leu Glu  
 200 205 210  
 Asp Leu Asp Arg Asn Lys Asp Gly Tyr Val Gln Val Glu Glu Tyr  
 215 220 225  
 Ile Ala Asp Leu Tyr Ser Ala Glu Pro Gly Glu Glu Glu Pro Ala  
 230 235 240  
 Trp Val Gln Thr Glu Arg Gln Gln Phe Arg Asp Phe Arg Asp Leu  
 245 250 255  
 Asn Lys Asp Gly His Leu Asp Gly Ser Glu Val Gly His Trp Val  
 260 265 270  
 Leu Pro Pro Ala Gln Asp Gln Pro Leu Val Glu Ala Asn His Leu  
 275 280 285  
 Leu His Glu Ser Asp Thr Asp Lys Asp Gly Arg Leu Ser Lys Ala  
 Page 139

290

295

300

Glu Ile Leu Gly Asn Trp Asn Met Phe Val Gly Ser Gln Ala Thr  
 305 310 315

Asn Tyr Gly Glu Asp Leu Thr Arg His His Asp Glu Leu  
 320 325

&lt;210&gt; 222

&lt;211&gt; 20

&lt;212&gt; DNA

&lt;213&gt; Artificial Sequence

&lt;220&gt;

&lt;223&gt; Synthetic Oligonucleotide Probe

&lt;400&gt; 222

cgcaggccct catggccagg 20

&lt;210&gt; 223

&lt;211&gt; 18

&lt;212&gt; DNA

&lt;213&gt; Artificial Sequence

&lt;220&gt;

&lt;223&gt; Synthetic Oligonucleotide Probe

&lt;400&gt; 223

gaaatcctgg gtaattgg 18

&lt;210&gt; 224

&lt;211&gt; 23

&lt;212&gt; DNA

&lt;213&gt; Artificial Sequence

&lt;220&gt;

&lt;223&gt; Synthetic Oligonucleotide Probe

&lt;400&gt; 224

gtgcgcggtg ctcacagctc atc 23

&lt;210&gt; 225

&lt;211&gt; 44

&lt;212&gt; DNA

&lt;213&gt; Artificial Sequence

&lt;220&gt;

&lt;223&gt; Synthetic Oligonucleotide Probe

&lt;400&gt; 225

ccccctgag cgacgctccc ccatgatgac gccacggga actt 44

&lt;210&gt; 226

&lt;211&gt; 2403

&lt;212&gt; DNA

&lt;213&gt; Homo Sapien

&lt;400&gt; 226

ggggccttgc cttccgcact cgggcgagc cgggtggatc tcgagcaggt 50

gcggagcccc gggcggcggg cgcgggtgag agggatccct gacgcctctg 100

tccctgtttc ttgtgcgtc ccagcctgtc tgtcgtcgtt ttggcgcccc 150

P1618P2C2 sequence listing.txt

cgctccccg cggtgcgggg ttgcacaccg atcctgggct tcgctcgatt 200  
 tgccgccgag gcgcctccca gacctagagg ggcgctggcc tggagcagcg 250  
 ggtcgtctgt gtctctcttc ctctgcgccg cgcccgggga tccgaaggg 300  
 gcggggctct gaggaggtga cgcgcggggc ctcccgacc ctggccttgc 350  
 ccgcattctc cctctctccc aggtgtgagc agcctatcag tcaccatgtc 400  
 cgcagcctgg atcccggctc tcggcctcgg tgtgtgtctg ctgctgctgc 450  
 cggggcccg gcgagcagag ggagccgctc ccattgctat cacatgtttt 500  
 accagaggct tggacatcag gaaagagaaa gcagatgtcc tctgccagg 550  
 gggctgccct cttgaggaat tctctgtgta tgggaacata gtatatgctt 600  
 ctgtatcgag catatgtggg gctgctgtcc acaggggagt aatcagcaac 650  
 tcagggggac ctgtacgagt ctatagccta cctggctcag aaaactattc 700  
 ctcatagat gccaatggca tccagtctca aatgctttct agatggctctg 750  
 cttctttcac agtaactaaa ggcaaaagta gtacacagga ggccacagga 800  
 caagcagtgt ccacagcaca tccaccaaca ggtaaaccgac taaagaaaac 850  
 acccgagaag aaaactggca ataaagattg taaagcagac attgcatttc 900  
 tgattgatgg aagctttaat attgggcagc gccgatttaa tttacagaag 950  
 aattttgttg gaaaagtggc tctaattgtg ggaattggaa cagaaggacc 1000  
 acatgtgggc cttgttcaag ccagtgaaca tcccaaaata gaattttact 1050  
 tgaaaaactt tacatcagcc aaagatgttt tgtttgccat aaaggaagta 1100  
 ggtttcagag ggggtaattc caatacagga aaagccttga agcatactgc 1150  
 tcagaaattc ttcacggtag atgctggagt aagaaaagg atccccaaag 1200  
 tgggtgggtg atttattgat gggtggcctt ctgatgacat cgaggaagca 1250  
 ggcattgtgg ccagagagtt tgggtgtcaat gtatttatag tttctgtggc 1300  
 caagcctatc cctgaagaac tggggatggt tcaggatgtc acatttggtg 1350  
 acaaggctgt ctgtcggaa ataggcttct tctcttacca catgcccaac 1400  
 tggtttggca ccacaaaata cgtaaagcct ctggtacaga agctgtgcac 1450  
 tcatgaacaa atgatgtgca gcaagacctg ttataactca gtgaacattg 1500  
 cttttcta at tgatggctcc agcagtgttg gagatagcaa tttccgcctc 1550  
 atgcttgaat ttgtttccaa catagccaag acttttgaaa tctcggacat 1600  
 tggtgccaag atagctgctg tacagtttac ttatgatcag cgcacggagt 1650  
 tcagtttcac tgactatagc accaaagaga atgtcctagc tgtcatcaga 1700

P1618P2C2 sequence listing.txt

aacatccgct atatgagtgg tggaacagct actggtgatg ccatttcctt 1750  
 cactgttaga aatgtgtttg gccctataag ggagagcccc aacaagaact 1800  
 tcctagtaat tgtcacagat gggcagtcct atgatgatgt ccaaggccct 1850  
 gcagctgctg cacatgatgc aggaatcact atcttctctg ttggtgtggc 1900  
 ttgggcacct ctggatgacc tgaaagatat ggcttctaaa ccgaaggagt 1950  
 ctcacgcttt cttcacaga gagttcacag gattagaacc aattgtttct 2000  
 gatgtcatca gaggcatttg tagagatttc ttagaatccc agcaataatg 2050  
 gtaacatttt gacaactgaa agaaaaagta caaggggatc cagtgtgtaa 2100  
 attgtattct cataatactg aaatgcttta gcatactaga atcagatata 2150  
 aaactattaa gtatgtcaac agccatttag gcaaataagc actcctttaa 2200  
 agccgctgcc ttctggttac aatttacagt gtactttggt aaaaacactg 2250  
 ctgaggcttc ataatcatgg ctcttagaaa ctcaggaaag aggagataat 2300  
 gtggattaaa accttaagag ttctaaccat gcctactaaa tgtacagata 2350  
 tgcaaattcc atagctcaat aaaagaatct gatacttaga ccaaaaaaaaa 2400  
 aaa 2403

<210> 227  
 <211> 550  
 <212> PRT  
 <213> Homo Sapien

<400> 227  
 Met Ser Ala Ala Trp Ile Pro Ala Leu Gly Leu Gly Val Cys Leu  
 1 5 10 15  
 Leu Leu Leu Pro Gly Pro Ala Gly Ser Glu Gly Ala Ala Pro Ile  
 20 25 30  
 Ala Ile Thr Cys Phe Thr Arg Gly Leu Asp Ile Arg Lys Glu Lys  
 35 40 45  
 Ala Asp Val Leu Cys Pro Gly Gly Cys Pro Leu Glu Glu Phe Ser  
 50 55 60  
 Val Tyr Gly Asn Ile Val Tyr Ala Ser Val Ser Ser Ile Cys Gly  
 65 70 75  
 Ala Ala Val His Arg Gly Val Ile Ser Asn Ser Gly Gly Pro Val  
 80 85 90  
 Arg Val Tyr Ser Leu Pro Gly Arg Glu Asn Tyr Ser Ser Val Asp  
 95 100 105  
 Ala Asn Gly Ile Gln Ser Gln Met Leu Ser Arg Trp Ser Ala Ser  
 110 115 120  
 Phe Thr Val Thr Lys Gly Lys Ser Ser Thr Gln Glu Ala Thr Gly  
 125 130 135

P1618P2C2 sequence listing.txt

Gln Ala Val Ser Thr	Ala His Pro Pro	Thr Gly Lys Arg Leu	Lys
140		145	150
Lys Thr Pro Glu	Lys Lys Thr Gly Asn	Lys Asp Cys Lys Ala	Asp
155		160	165
Ile Ala Phe Leu	Ile Asp Gly Ser Phe	Asn Ile Gly Gln Arg	Arg
170		175	180
Phe Asn Leu Gln	Lys Asn Phe Val Gly	Lys Val Ala Leu Met	Leu
185		190	195
Gly Ile Gly Thr	Glu Gly Pro His Val	Gly Leu Val Gln Ala	Ser
200		205	210
Glu His Pro Lys	Ile Glu Phe Tyr Leu	Lys Asn Phe Thr Ser	Ala
215		220	225
Lys Asp Val Leu	Phe Ala Ile Lys Glu	Val Gly Phe Arg Gly	Gly
230		235	240
Asn Ser Asn Thr	Gly Lys Ala Leu Lys	His Thr Ala Gln Lys	Phe
245		250	255
Phe Thr Val Asp	Ala Gly Val Arg Lys	Gly Ile Pro Lys Val	Val
260		265	270
Val Val Phe Ile	Asp Gly Trp Pro Ser	Asp Asp Ile Glu Glu	Ala
275		280	285
Gly Ile Val Ala	Arg Glu Phe Gly Val	Asn Val Phe Ile Val	Ser
290		295	300
Val Ala Lys Pro	Ile Pro Glu Glu Leu	Gly Met Val Gln Asp	Val
305		310	315
Thr Phe Val Asp	Lys Ala Val Cys Arg	Asn Asn Gly Phe Phe	Ser
320		325	330
Tyr His Met Pro	Asn Trp Phe Gly Thr	Thr Lys Tyr Val Lys	Pro
335		340	345
Leu Val Gln Lys	Leu Cys Thr His Glu	Gln Met Met Cys Ser	Lys
350		355	360
Thr Cys Tyr Asn	Ser Val Asn Ile Ala	Phe Leu Ile Asp Gly	Ser
365		370	375
Ser Ser Val Gly	Asp Ser Asn Phe Arg	Leu Met Leu Glu Phe	Val
380		385	390
Ser Asn Ile Ala	Lys Thr Phe Glu Ile	Ser Asp Ile Gly Ala	Lys
395		400	405
Ile Ala Ala Val	Gln Phe Thr Tyr Asp	Gln Arg Thr Glu Phe	Ser
410		415	420
Phe Thr Asp Tyr	Ser Thr Lys Glu Asn	Val Leu Ala Val Ile	Arg
425		430	435
Asn Ile Arg Tyr	Met Ser Gly Gly Thr	Ala Thr Gly Asp Ala	Ile
440		445	450

P1618P2C2 sequence listing.txt

Ser	Phe	Thr	Val	Arg	Asn	Val	Phe	Gly	Pro	Ile	Arg	Glu	Ser	Pro
				455					460					465
Asn	Lys	Asn	Phe	Leu	Val	Ile	Val	Thr	Asp	Gly	Gln	Ser	Tyr	Asp
				470					475					480
Asp	Val	Gln	Gly	Pro	Ala	Ala	Ala	Ala	His	Asp	Ala	Gly	Ile	Thr
				485					490					495
Ile	Phe	Ser	Val	Gly	Val	Ala	Trp	Ala	Pro	Leu	Asp	Asp	Leu	Lys
				500					505					510
Asp	Met	Ala	Ser	Lys	Pro	Lys	Glu	Ser	His	Ala	Phe	Phe	Thr	Arg
				515					520					525
Glu	Phe	Thr	Gly	Leu	Glu	Pro	Ile	Val	Ser	Asp	Val	Ile	Arg	Gly
				530					535					540
Ile	Cys	Arg	Asp	Phe	Leu	Glu	Ser	Gln	Gln					
				545					550					

<210> 228  
 <211> 18  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Synthetic Oligonucleotide Probe

<400> 228  
 tgggtctcgca caccgatc 18

<210> 229  
 <211> 18  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Synthetic Oligonucleotide Probe

<400> 229  
 ctgctgtcca caggggag 18

<210> 230  
 <211> 18  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Synthetic Oligonucleotide Probe

<400> 230  
 ccttgaagca tactgctc 18

<210> 231  
 <211> 18  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Synthetic Oligonucleotide Probe

<400> 231



P1618P2C2 sequence listing.txt

gagatagcaa tttccgcc 18

<210> 232

<211> 18

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic Oligonucleotide Probe

<400> 232

ttcctcaaga gggcagcc 18

<210> 233

<211> 24

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic Oligonucleotide Probe

<400> 233

cttggcacca atgtccgaga tttc 24

<210> 234

<211> 45

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic Oligonucleotide Probe

<400> 234

gctctgagga aggtgacgcg cggggcctcc gaacccttgg ccttg 45

<210> 235

<211> 2586

<212> DNA

<213> Homo Sapien

<400> 235

cgccgcgctc ccgcacccgc ggcccgccca ccgcgccgct cccgcatctg 50

caccgcgagc ccggcggcct cccggcgagg gcgagcagat ccagtccggc 100

ccgcagcgca actcgggtcca gtcggggcgg cggctgcggg cgcagagcgg 150

agatgcagcg gcttggggcc accctgctgt gcttgcctgt ggccggcggc 200

gtccccacgg cccccgcgcc cgctccgacg gcgacctcgg ctccagtcaa 250

gcccggcccc gctctcagct acccgagga ggaggccacc ctcaatgaga 300

tgttccgcga ggttgaggaa ctgatggagg acacgcagca caaattgcgc 350

agcgcggtgg aagagatgga ggcagaagaa gctgctgcta aagcatcatc 400

agaagtgaac ctggcaaact tacctcccag ctatcacaat gagaccaaca 450

cagacacgaa ggttgaaat aataccatcc atgtgcaccg agaaattcac 500

aagataacca acaaccagac tggacaaatg gtcttttcag agacagttat 550

P1618P2C2 sequence listing.txt

cacatctgtg ggagacgaag aaggcagaag gagccacgag tgcattcatcg 600  
 acgaggactg tgggcccagc atgtactgcc agtttgccag cttccagtac 650  
 acctgccagc catgccgggg ccagaggatg ctctgcaccc gggacagtga 700  
 gtgctgtgga gaccagctgt gtgtctgggg tctactgcacc aaaatggcca 750  
 ccaggggcag caatgggacc atctgtgaca accagaggga ctgccagccg 800  
 gggctgtgct gtgccttcca gagaggcctg ctgttcctg tgtgcacacc 850  
 cctgcccgtg gagggcgagc ttgccatga ccccgccagc cggcttctg 900  
 acctcatcac ctgggagcta gagcctgatg gagccttga ccgatgccct 950  
 tgtgccagtg gcctctctg ccagccccac agccacagcc tgggtgatgt 1000  
 gtgcaagccg accttcgtg ggagccgtga ccaagatggg gagatcctgc 1050  
 tgcccagaga ggtccccgat gagtatgaag ttggcagctt catggaggag 1100  
 gtgcgccagg agctggagga cctggagagg agcctgactg aagagatggc 1150  
 gctgggggag cctgcggctg ccgccgctgc actgctggga ggggaagaga 1200  
 tttagatctg gaccaggctg tgggtagatg tgcaatagaa atagctaatt 1250  
 tatttcccca ggtgtgtgct ttaggcgtg gctgaccagg cttcttccta 1300  
 catcttcttc ccagtaagt tcccctctg cttgacagca tgaggtgttg 1350  
 tgcatttgtt cagctcccc aggtgttct ccaggcttca cagtctggtg 1400  
 cttgggagag tcaggcaggg ttaaactgca ggagcagttt gccaccctg 1450  
 tccagattat tggctgcttt gcctctacca gttggcagac agccgtttgt 1500  
 tctacatggc tttgataatt gtttgagggg aggagatgga aacaatgtgg 1550  
 agtctccctc tgattggtt tggggaaatg tggagaagag tgccctgctt 1600  
 tgcaaacatc aacctggcaa aaatgaaca aatgaatttt ccacgcagtt 1650  
 ctttccatgg gcataggtaa gctgtgcctt cagctgttgc agatgaaatg 1700  
 ttctgttcac cctgcattac atgtgtttat tcatccagca gtgttgctca 1750  
 gctcctacct ctgtgccagg gcagcatttt catatccaag atcaattccc 1800  
 tctctcagca cagcctgggg aggggggtcat tgttctctc gtccatcagg 1850  
 gatctcagag gctcagagac tgcaagctgc ttgcccaagt cacacagcta 1900  
 gtgaagacca gagcagtttc atctggttgt gactctaagc tcagtgtctt 1950  
 ctccactacc ccacaccagc cttggtgcca ccaaaagtgc tccccaaaag 2000  
 gaaggagaat gggatttttc ttgaggcatg cacatctgga attaaggtca 2050  
 aactaattct cacatccctc taaaagtaaa ctactgttag gaacagcagt 2100  
 gttctcacag tgtggggcag ccgtccttct aatgaagaca atgatattga 2150

P1618P2C2 sequence listing.txt

cactgtccct ctttggcagt tgcattagta actttgaaag gtatatgact 2200  
gagcgtagca tacagggttaa cctgcagaaa cagtacttag gtaattgtag 2250  
ggcgaggatt ataaatgaaa tttgcaaaat cacttagcag caactgaaga 2300  
caattatcaa ccacgtggag aaaatcaaac cgagcagggc tgtgtgaaac 2350  
atggttgtaa tatgcgactg cgaacactga actctacgcc actccacaaa 2400  
tgatgttttc aggtgtcatg gactgttgcc accatgtatt catccagagt 2450  
tcttaaagtt taaagttgca catgattgta taagcatgct ttctttgagt 2500  
tttaaattat gtataaacat aagttgcatt tagaaatcaa gcataaatca 2550  
cttcaactgc aaaaaaaaaa aaaaaaaaaa aaaaaa 2586

<210> 236  
<211> 350  
<212> PRT  
<213> Homo Sapien

<400> 236  
Met Gln Arg Leu Gly Ala Thr Leu Leu Cys Leu Leu Leu Ala Ala  
1 5 10 15  
Ala Val Pro Thr Ala Pro Ala Pro Ala Pro Thr Ala Thr Ser Ala  
20 25 30  
Pro Val Lys Pro Gly Pro Ala Leu Ser Tyr Pro Gln Glu Glu Ala  
35 40 45  
Thr Leu Asn Glu Met Phe Arg Glu Val Glu Glu Leu Met Glu Asp  
50 55 60  
Thr Gln His Lys Leu Arg Ser Ala Val Glu Glu Met Glu Ala Glu  
65 70 75  
Glu Ala Ala Ala Lys Ala Ser Ser Glu Val Asn Leu Ala Asn Leu  
80 85 90  
Pro Pro Ser Tyr His Asn Glu Thr Asn Thr Asp Thr Lys Val Gly  
95 100 105  
Asn Asn Thr Ile His Val His Arg Glu Ile His Lys Ile Thr Asn  
110 115 120  
Asn Gln Thr Gly Gln Met Val Phe Ser Glu Thr Val Ile Thr Ser  
125 130 135  
Val Gly Asp Glu Glu Gly Arg Arg Ser His Glu Cys Ile Ile Asp  
140 145 150  
Glu Asp Cys Gly Pro Ser Met Tyr Cys Gln Phe Ala Ser Phe Gln  
155 160 165  
Tyr Thr Cys Gln Pro Cys Arg Gly Gln Arg Met Leu Cys Thr Arg  
170 175 180  
Asp Ser Glu Cys Cys Gly Asp Gln Leu Cys Val Trp Gly His Cys  
185 190 195

P1618P2C2 sequence listing.txt

Thr Lys Met Ala Thr Arg Gly Ser Asn Gly Thr Ile Cys Asp Asn  
 200 205 210  
 Gln Arg Asp Cys Gln Pro Gly Leu Cys Cys Ala Phe Gln Arg Gly  
 215 220 225  
 Leu Leu Phe Pro Val Cys Thr Pro Leu Pro Val Glu Gly Glu Leu  
 230 235 240  
 Cys His Asp Pro Ala Ser Arg Leu Leu Asp Leu Ile Thr Trp Glu  
 245 250 255  
 Leu Glu Pro Asp Gly Ala Leu Asp Arg Cys Pro Cys Ala Ser Gly  
 260 265 270  
 Leu Leu Cys Gln Pro His Ser His Ser Leu Val Tyr Val Cys Lys  
 275 280 285  
 Pro Thr Phe Val Gly Ser Arg Asp Gln Asp Gly Glu Ile Leu Leu  
 290 295 300  
 Pro Arg Glu Val Pro Asp Glu Tyr Glu Val Gly Ser Phe Met Glu  
 305 310 315  
 Glu Val Arg Gln Glu Leu Glu Asp Leu Glu Arg Ser Leu Thr Glu  
 320 325 330  
 Glu Met Ala Leu Gly Glu Pro Ala Ala Ala Ala Ala Ala Leu Leu  
 335 340 345  
 Gly Gly Glu Glu Ile  
 350

<210> 237  
 <211> 17  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Synthetic oligonucleotide probe

<400> 237  
 ggagctgcac cccttgc 17

<210> 238  
 <211> 49  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Synthetic Oligonucleotide Probe

<400> 238  
 ggaggactgt gccacatga gagactcttc aaaccaagg caaaattgg 49

<210> 239  
 <211> 24  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Synthetic Oligonucleotide Probe

P1618P2C2 sequence listing.txt

<400> 239  
gcagagcgga gatgcagcgg cttg 24

<210> 240  
<211> 18  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Synthetic Oligonucleotide Probe

<400> 240  
ttggcagctt catggagg 18

<210> 241  
<211> 18  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Synthetic Oligonucleotide Probe

<400> 241  
cctgggcaaa aatgcaac 18

<210> 242  
<211> 24  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Synthetic Oligonucleotide Probe

<400> 242  
ctccagctcc tggcgacac cctc 24

<210> 243  
<211> 45  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Synthetic Oligonucleotide Probe

<400> 243  
ggctctcagc taccgagcag gagcgaggcc accctcaatg agatg 45

<210> 244  
<211> 3679  
<212> DNA  
<213> Homo Sapien

<400> 244  
aaggaggctg ggaggaaaga ggtaagaaag gttagagaac ctacctcaca 50  
tctctctggg ctcagaagga ctctgaagat aacaataatt tcagcccatc 100  
cactctcctt ccctcccaaa cacacatgtg catgtacaca cacacataca 150  
cacacataca ctttctctc cttcactgaa gactcacagt cactcactct 200  
gtgagcaggt catagaaaag gacactaaag ccttaaggac aggcctggcc 250

P1618P2C2 sequence listing.txt

attacctctg cagctccttt ggcttggtga gtcaaaaaac atgggagggg 300  
 ccaggcacgg tgactcacac ctgtaatccc agcatttttg gagaccgagg 350  
 tgagcagatc acttgaggtc aggagttcga gaccagcctg gccaacatgg 400  
 agaaaccccc atctctacta aaaatacaaa aattagccag gagtgggtggc 450  
 aggtgcctgt aatcccagct actcaggtgg ctgagccagg agaatcgctt 500  
 gaatccagga ggcggaggat gcagtcagct gagtgcaccg ctgcactcca 550  
 gcctgggtga cagaatgaga ctctgtctca aacaaacaaa cacgggagga 600  
 ggggtagata ctgctttctt gcaacctcct taactctgca tcctcttctt 650  
 ccagggctgc ccctgatggg gcctggcaat gactgagcag gcccagcccc 700  
 agaggacaag gaagagaagg catattgagg agggcaagaa gtgacgcccc 750  
 gtgtagaatg actgccctgg gaggggtggtt ccttgggccc tggcaggggtt 800  
 gctgaccctt accctgcaaa acacaaagag caggactcca gactctcctt 850  
 gtgaatggtc ccctgccctg cagctccacc atgaggcttc tcgtggcccc 900  
 actcttgcta gcttgggtgg ctggtgccac tgccactgtg cccgtggtac 950  
 cctggcatgt tccctgcccc cctcagtgtg cctgccagat ccggccctgg 1000  
 tatacgcccc gctcgtccta ccgcgaggct accactgtgg actgcaatga 1050  
 cctattcctg acggcagtcc ccccggcact ccccgcaggc acacagacct 1100  
 tgctcctgca gagcaacagc attgtccgtg tggaccagag tgagctgggc 1150  
 tacctggcca atctcacaga gctggacctg tcccagaaca gcttttcgga 1200  
 tgcccagac tgtgatttcc atgccctgcc ccagctgctg agcctgcacc 1250  
 tagaggagaa ccagctgacc cggctggagg accacagctt tgcagggctg 1300  
 gccagcctac aggaactcta tctcaaccac aaccagctct accgcatcgc 1350  
 cccaggggcc ttttctggcc tcagcaactt gctgcggctg cacctcaact 1400  
 ccaacctcct gagggccatt gacagccgct ggtttgaaat gctgccaac 1450  
 ttggagatac tcatgattgg cggcaacaag gtagatgcca tcctggacat 1500  
 gaacttccgg cccctggcca acctgcgtag cctggtgcta gcaggcatga 1550  
 acctgcggga gatctccgac tatgccctgg aggggctgca aagcctggag 1600  
 agcctctcct tctatgacaa ccagctggcc cgggtgcca ggcgggcact 1650  
 ggaacaggtg cccgggtca agttcctaga cctcaacaag aaccgctcc 1700  
 agcgggtagg gccgggggac tttgccaaca tgctgcacct taaggagctg 1750  
 ggactgaaca acatggagga gctggtctcc atcgacaagt ttgccctggt 1800

P1618P2C2 sequence listing.txt

gaacctcccc gagctgacca agctggacat caccaataac ccacggctgt 1850  
 ccttcatcca cccccgcgcc ttccaccacc tgccccagat ggagaccctc 1900  
 atgctcaaca acaacgctct cagtgccttg caccagcaga cggaggagtc 1950  
 cctgccccaac ctgcaggagg taggtctcca cggcaacccc atccgctgtg 2000  
 actgtgtcat ccgctggggc aatgccacgg gcacccgtgt ccgcttcac 2050  
 gagccgcaat ccaccctgtg tgcggagcct ccggacctcc agcgccctccc 2100  
 ggtccgtgag gtgcccttcc gggagatgac ggaccactgt ttgcccctca 2150  
 tctccccacg aagcttcccc ccaagcctcc aggtagccag tggagagagc 2200  
 atggtgctgc attgccgggc actggccgaa cccgaacccg agatctactg 2250  
 ggctactcca gctgggcttc gactgacacc tgcccatgca ggcaggaggt 2300  
 accgggtgta ccccgagggg accctggagc tgcggagggt gacagcagaa 2350  
 gaggcagggc tatacacctg tgtggcccag aacctggtgg gggctgacac 2400  
 taagacggtt agtgtggttg tgggccgtgc tctcctccag ccaggcaggg 2450  
 acgaaggaca ggggctggag ctccgggtgc aggagacca cccctatcac 2500  
 atcctgctat cttgggtcac cccaccaaac acagtgtcca ccaacctcac 2550  
 ctggtccagt gcctcctccc tccggggcca gggggccaca gctctggccc 2600  
 gcctgcctcg gggaaccac agctacaaca ttaccgcct ccttcaggcc 2650  
 acggagtact gggcctgcct gcaagtggcc tttgctgatg cccacacca 2700  
 gttggcttgt gtatgggcca ggaccaaaga ggccacttct tgccacagag 2750  
 ccttagggga tcgtcctggg ctcatcgcca tcctggctct cgctgtcctt 2800  
 ctctggcag ctgggctagc ggccacctt ggcacaggcc aaccaggaa 2850  
 ggggtgtgggt gggaggcggc ctctccctcc agcctgggtt ttctggggct 2900  
 ggagtcccc ttctgtccgg gttgtgtctg ctcccctcgt cctgccctgg 2950  
 aatccagga ggaagctgcc cagatcctca gaaggggaga cactgttgcc 3000  
 accattgtct caaaattctt gaagctcagc ctgttctcag cagtagagaa 3050  
 atcactagga ctacttttta ccaaagaga agcagtctgg gccagatgcc 3100  
 ctgccaggaa agggacatgg acccactgc ttgaggcctg gcagctgggc 3150  
 caagacagat ggggctttgt ggccctgggg gtgcttctgc agccttgaaa 3200  
 aagttgcct tacctcctag ggtcacctct gctgccattc tgaggaacat 3250  
 ctccaaggaa caggaggac tttggctaga gcctcctgcc tccccatctt 3300  
 ctctctgccc agaggctcct gggcctggct tggctgtccc ctacctgtgt 3350  
 ccccgggctg cacccttcc tcttctctt ctctgtacag tctcagttgc 3400

P1618P2C2 sequence listing.txt

ttgctcttgt gcctcctggg caagggctga aggaggccac tccatctcac 3450  
ctcggggggc tgccctcaat gtgggagtga cccagccag atctgaagga 3500  
catttgggag agggatgccc aggaacgcct catctcagca gcctgggctc 3550  
ggcattccga agctgacttt ctataggcaa tttgtacct ttgtggagaa 3600  
atgtgtcacc tcccccaacc cgattcactc ttttctcctg ttttgtaaaa 3650  
aataaaaata aataataaca ataaaaaaa 3679

<210> 245  
<211> 713  
<212> PRT  
<213> Homo Sapien

<400> 245  
Met Arg Leu Leu Val Ala Pro Leu Leu Leu Ala Trp Val Ala Gly  
1 5 10 15  
Ala Thr Ala Thr Val Pro Val Val Pro Trp His Val Pro Cys Pro  
20 25 30  
Pro Gln Cys Ala Cys Gln Ile Arg Pro Trp Tyr Thr Pro Arg Ser  
35 40 45  
Ser Tyr Arg Glu Ala Thr Thr Val Asp Cys Asn Asp Leu Phe Leu  
50 55 60  
Thr Ala Val Pro Pro Ala Leu Pro Ala Gly Thr Gln Thr Leu Leu  
65 70 75  
Leu Gln Ser Asn Ser Ile Val Arg Val Asp Gln Ser Glu Leu Gly  
80 85 90  
Tyr Leu Ala Asn Leu Thr Glu Leu Asp Leu Ser Gln Asn Ser Phe  
95 100 105  
Ser Asp Ala Arg Asp Cys Asp Phe His Ala Leu Pro Gln Leu Leu  
110 115 120  
Ser Leu His Leu Glu Glu Asn Gln Leu Thr Arg Leu Glu Asp His  
125 130 135  
Ser Phe Ala Gly Leu Ala Ser Leu Gln Glu Leu Tyr Leu Asn His  
140 145 150  
Asn Gln Leu Tyr Arg Ile Ala Pro Arg Ala Phe Ser Gly Leu Ser  
155 160 165  
Asn Leu Leu Arg Leu His Leu Asn Ser Asn Leu Leu Arg Ala Ile  
170 175 180  
Asp Ser Arg Trp Phe Glu Met Leu Pro Asn Leu Glu Ile Leu Met  
185 190 195  
Ile Gly Gly Asn Lys Val Asp Ala Ile Leu Asp Met Asn Phe Arg  
200 205 210  
Pro Leu Ala Asn Leu Arg Ser Leu Val Leu Ala Gly Met Asn Leu  
215 220 225



P1618P2C2 sequence listing.txt

Arg Glu Ile Ser	Asp	Tyr	Ala	Leu	Glu	Gly	Leu	Gln	Ser	Leu	Glu
	230					235					240
Ser Leu Ser Phe	Tyr	Asp	Asn	Gln	Leu	Ala	Arg	Val	Pro	Arg	Arg
	245					250					255
Ala Leu Glu Gln	Val	Pro	Gly	Leu	Lys	Phe	Leu	Asp	Leu	Asn	Lys
	260					265					270
Asn Pro Leu Gln	Arg	Val	Gly	Pro	Gly	Asp	Phe	Ala	Asn	Met	Leu
	275					280					285
His Leu Lys Glu	Leu	Gly	Leu	Asn	Asn	Met	Glu	Glu	Leu	Val	Ser
	290					295					300
Ile Asp Lys Phe	Ala	Leu	Val	Asn	Leu	Pro	Glu	Leu	Thr	Lys	Leu
	305					310					315
Asp Ile Thr Asn	Asn	Pro	Arg	Leu	Ser	Phe	Ile	His	Pro	Arg	Ala
	320					325					330
Phe His His Leu	Pro	Gln	Met	Glu	Thr	Leu	Met	Leu	Asn	Asn	Asn
	335					340					345
Ala Leu Ser Ala	Leu	His	Gln	Gln	Thr	Val	Glu	Ser	Leu	Pro	Asn
	350					355					360
Leu Gln Glu Val	Gly	Leu	His	Gly	Asn	Pro	Ile	Arg	Cys	Asp	Cys
	365					370					375
Val Ile Arg Trp	Ala	Asn	Ala	Thr	Gly	Thr	Arg	Val	Arg	Phe	Ile
	380					385					390
Glu Pro Gln Ser	Thr	Leu	Cys	Ala	Glu	Pro	Pro	Asp	Leu	Gln	Arg
	395					400					405
Leu Pro Val Arg	Glu	Val	Pro	Phe	Arg	Glu	Met	Thr	Asp	His	Cys
	410					415					420
Leu Pro Leu Ile	Ser	Pro	Arg	Ser	Phe	Pro	Pro	Ser	Leu	Gln	Val
	425					430					435
Ala Ser Gly Glu	Ser	Met	Val	Leu	His	Cys	Arg	Ala	Leu	Ala	Glu
	440					445					450
Pro Glu Pro Glu	Ile	Tyr	Trp	Val	Thr	Pro	Ala	Gly	Leu	Arg	Leu
	455					460					465
Thr Pro Ala His	Ala	Gly	Arg	Arg	Tyr	Arg	Val	Tyr	Pro	Glu	Gly
	470					475					480
Thr Leu Glu Leu	Arg	Arg	Val	Thr	Ala	Glu	Glu	Ala	Gly	Leu	Tyr
	485					490					495
Thr Cys Val Ala	Gln	Asn	Leu	Val	Gly	Ala	Asp	Thr	Lys	Thr	Val
	500					505					510
Ser Val Val Val	Gly	Arg	Ala	Leu	Leu	Gln	Pro	Gly	Arg	Asp	Glu
	515					520					525
Gly Gln Gly Leu	Glu	Leu	Arg	Val	Gln	Glu	Thr	His	Pro	Tyr	His
	530					535					540

P1618P2C2 sequence listing.txt

Ile	Leu	Leu	Ser	Trp	Val	Thr	Pro	Pro	Asn	Thr	Val	Ser	Thr	Asn
				545					550					555
Leu	Thr	Trp	Ser	Ser	Ala	Ser	Ser	Leu	Arg	Gly	Gln	Gly	Ala	Thr
				560					565					570
Ala	Leu	Ala	Arg	Leu	Pro	Arg	Gly	Thr	His	Ser	Tyr	Asn	Ile	Thr
				575					580					585
Arg	Leu	Leu	Gln	Ala	Thr	Glu	Tyr	Trp	Ala	Cys	Leu	Gln	Val	Ala
				590					595					600
Phe	Ala	Asp	Ala	His	Thr	Gln	Leu	Ala	Cys	Val	Trp	Ala	Arg	Thr
				605					610					615
Lys	Glu	Ala	Thr	Ser	Cys	His	Arg	Ala	Leu	Gly	Asp	Arg	Pro	Gly
				620					625					630
Leu	Ile	Ala	Ile	Leu	Ala	Leu	Ala	Val	Leu	Leu	Leu	Ala	Ala	Gly
				635					640					645
Leu	Ala	Ala	His	Leu	Gly	Thr	Gly	Gln	Pro	Arg	Lys	Gly	Val	Gly
				650					655					660
Gly	Arg	Arg	Pro	Leu	Pro	Pro	Ala	Trp	Ala	Phe	Trp	Gly	Trp	Ser
				665					670					675
Ala	Pro	Ser	Val	Arg	Val	Val	Ser	Ala	Pro	Leu	Val	Leu	Pro	Trp
				680					685					690
Asn	Pro	Gly	Arg	Lys	Leu	Pro	Arg	Ser	Ser	Glu	Gly	Glu	Thr	Leu
				695					700					705
Leu	Pro	Pro	Leu	Ser	Gln	Asn	Ser							
				710										

<210> 246  
 <211> 22  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Synthetic Oligonucleotide Probe

<400> 246  
 aacaaggtaa gatgccatcc tg 22

<210> 247  
 <211> 24  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Synthetic Oligonucleotide Probe

<400> 247  
 aaactgtcg atggagacca gctc 24

<210> 248  
 <211> 45  
 <212> DNA  
 <213> Artificial Sequence

P1618P2C2 sequence listing.txt

<220>

<223> Synthetic Oligonucleotide Probe

<400> 248

aggggctgca aagcctggag agcctctcct tctatgacaa ccagc 45

<210> 249

<211> 3401

<212> DNA

<213> Homo Sapien

<400> 249

gcaagccaag gcgctgtttg agaaggtgaa gaagttccgg acccatgtgg 50

aggaggggga cattgtgtac cgcctctaca tgcggcagac catcatcaag 100

gtgatcaagt tcatcctcat catctgctac accgtctact acgtgcacaa 150

catcaagttc gacgtggact gcaccgtgga cattgagagc ctgacgggct 200

accgcaccta ccgctgtgcc caccctctgg ccacactctt caagatcctg 250

gcgtccttct acatcagcct agtcatcttc tacggcctca tctgcatgta 300

cacactgtgg tggatgctac ggcgctccct caagaagtac tcgtttgagt 350

cgatccgtga ggagagcagc tacagcgaca tccccgacgt caagaacgac 400

ttcgccttca tgctgcacct cattgaccaa tacgaccgc tctactcaa 450

gcgcttcgcc gtcttcctgt cggaggtgag tgagaacaag ctgcggcagc 500

tgaacctcaa caacgagtgg acgctggaca agctccggca gcggctcacc 550

aagaacgcgc aggacaagct ggagctgcac ctgttcatgc tcagtggcat 600

ccctgacact gtgtttgacc tgggtggagct ggaggtcctc aagctggagc 650

tgatccccga cgtgaccatc ccgcccagca ttgcccagct cacgggcctc 700

aaggagctgt ggctctacca cacagcggcc aagattgaag cgcctgcgct 750

ggccttctctg cgcgagaacc tgcgggcgct gcacatcaag ttcaccgaca 800

tcaaggagat cccgctgtgg atctatagcc tgaagacact ggaggagctg 850

cacctgacgg gcaacctgag cgcggagaac aaccgctaca tcgtcatcga 900

cgggctgcgg gagctcaaac gcctcaaggt gctgcggctc aagagcaacc 950

taagcaagct gccacaggtg gtcacagatg tgggcgtgca cctgcagaag 1000

ctgtccatca acaatgaggg caccaagctc atcgtcctca acagcctcaa 1050

gaagatggcg aacctgactg agctggagct gatccgctgc gacctggagc 1100

gcatcccca ctccatcttc agcctccaca acctgcagga gattgacctc 1150

aaggacaaca acctcaagac catcgaggag atcatcagct tccagcacct 1200

gcaccgcctc acctgcctta agctgtggta caaccacatc gcctacatcc 1250

P1618P2C2 sequence listing.txt

ccatccagat cggcaacctc accaacctgg agcgcctcta cctgaaccgc 1300  
aacaagatcg agaagatccc caccagctc ttctactgcc gcaagctgcg 1350  
ctacctggac ctgagccaca acaacctgac cttcctccct gccgacatcg 1400  
gcctcctgca gaacctccag aacctagcca tcacggccaa ccggatcgag 1450  
acgctccctc cggagctctt ccagtgccgg aagctgcggg ccctgcacct 1500  
gggcaacaac gtgctgcagt cactgccctc cagggtgggc gagctgacca 1550  
acctgacgca gatcgagctg cggggcaacc ggctggagtg cctgcctgtg 1600  
gagctgggag agtgcccact gctcaagcgc agcggcttgg tggaggagga 1650  
ggacctgttc aacacactgc caccgaggt gaaggagcgg ctgtggaggg 1700  
ctgacaagga gcaggcctga gcgaggccgg cccagcacag caagcagcag 1750  
gaccgctgcc cagtcctcag gcccgagggg gcaggcctag cttctcccag 1800  
aactcccga cagccaggac agcctcgcgg ctgggcagga gcctggggcc 1850  
gcttgtgagt caggccagag cgagaggaca gtatctgtgg ggctggcccc 1900  
ttttctccct ctgagactca cgtccccag ggcaagtgt tgtggaggag 1950  
agcaagtctc aagagcgcag tatttgata atcagggtct cctccctgga 2000  
ggccagctct gccccagggg ctgagctgcc accagaggtc ctgggaccct 2050  
cactttagtt cttggatatt atttttctcc atctcccacc tccttcatcc 2100  
agataactta tacattccca agaaagttca gccagatgg aaggtgttca 2150  
gggaaagggt ggctgccttt tccccttgtc cttatttagc gatgccgccg 2200  
ggcatttaac acccacctgg acttcagcag agtgggtccg ggcgaaccag 2250  
ccatgggacg gtcaccacgc agtgccgggc tgggctctgc ggtgcggtcc 2300  
acgggagagc aggcctccag ctggaaaggc caggcctgga gcttgcctct 2350  
tcagtttttg tggcagtttt agttttttgt ttttttttt tttaatcaa 2400  
aaacaatttt ttttaaaaaa agctttgaa aatggatggt ttgggtatta 2450  
aaaagaaaaa aaaaacttaa aaaaaaaaag acactaacgg ccagtgcgtt 2500  
ggagtctcag ggcaggggtg cagtttccct tgagcaaagc agccagacgt 2550  
tgaactgtgt ttcctttccc tgggcgcagg gtgcagggtg tcttccggat 2600  
ctggtgtgac cttggtccag gagttctatt tgttcctggg gagggagggt 2650  
tttttgttt ttttttgggt ttttttgggt tcttgttttc tttctcctcc 2700  
atgtgtcttg gcaggcactc atttctgtgg ctgtcggcca gagggaatgt 2750  
tctggagctg ccaaggaggg aggagactcg ggttggttaa tccccgatg 2800  
aacggtgctc cattcgcacc tcccctctc gtgcctgccc tgctctcca 2850

P1618P2C2 sequence listing.txt

cgcacagtgt taaggagcca agaggagcca cttcgcccag actttgtttc 2900  
 cccacctcct gcggcatggg tgtgtccagt gccaccgctg gcctccgctg 2950  
 cttccatcag ccctgtcgcc acctggtcct tcatgaagag cagacactta 3000  
 gaggctgggc gggaatgggg aggtcgcccc tgggagggca ggcgttggtt 3050  
 ccaagccggt tcccgtccct ggcgccctgga gtgcacacag cccagtcggc 3100  
 acctggtggc tggaagccaa cctgctttag atcactcggg tccccacctt 3150  
 agaaggggtcc ccgccttaga tcaatcacgt ggacactaag gcacgtttta 3200  
 gagtctcttg tcttaatgat tatgtccatc cgtctgtccg tccatttggtg 3250  
 ttttctgcgt cgtgtcattg gatataatcc tcagaaataa tgcacactag 3300  
 cctctgacaa ccatgaagca aaaatccgtt acatgtgggt ctgaacttgt 3350  
 agactcggtc acagtatcaa ataaaatcta taacagaaaa aaaaaaaaaa 3400

a 3401

<210> 250  
 <211> 546  
 <212> PRT  
 <213> Homo Sapien

<400> 250  
 Met Arg Gln Thr Ile Ile Lys Val Ile Lys Phe Ile Leu Ile Ile  
 1 5 10 15  
 Cys Tyr Thr Val Tyr Tyr Val His Asn Ile Lys Phe Asp Val Asp  
 20 25 30  
 Cys Thr Val Asp Ile Glu Ser Leu Thr Gly Tyr Arg Thr Tyr Arg  
 35 40 45  
 Cys Ala His Pro Leu Ala Thr Leu Phe Lys Ile Leu Ala Ser Phe  
 50 55 60  
 Tyr Ile Ser Leu Val Ile Phe Tyr Gly Leu Ile Cys Met Tyr Thr  
 65 70 75  
 Leu Trp Trp Met Leu Arg Arg Ser Leu Lys Lys Tyr Ser Phe Glu  
 80 85 90  
 Ser Ile Arg Glu Glu Ser Ser Tyr Ser Asp Ile Pro Asp Val Lys  
 95 100 105  
 Asn Asp Phe Ala Phe Met Leu His Leu Ile Asp Gln Tyr Asp Pro  
 110 115 120  
 Leu Tyr Ser Lys Arg Phe Ala Val Phe Leu Ser Glu Val Ser Glu  
 125 130 135  
 Asn Lys Leu Arg Gln Leu Asn Leu Asn Asn Glu Trp Thr Leu Asp  
 140 145 150  
 Lys Leu Arg Gln Arg Leu Thr Lys Asn Ala Gln Asp Lys Leu Glu  
 155 160 165

P1618P2C2 sequence listing.txt

Leu His Leu Phe	Met	Leu Ser Gly Ile	Pro Asp Thr Val Phe	Asp
	170		175	180
Leu Val Glu Leu	Glu Val Leu Lys Leu	Glu Leu Ile Pro Asp	Val	
	185	190	195	
Thr Ile Pro Pro	Ser Ile Ala Gln Leu	Thr Gly Leu Lys Glu	Leu	
	200	205	210	
Trp Leu Tyr His	Thr Ala Ala Lys Ile	Glu Ala Pro Ala Leu	Ala	
	215	220	225	
Phe Leu Arg Glu	Asn Leu Arg Ala Leu	His Ile Lys Phe Thr	Asp	
	230	235	240	
Ile Lys Glu Ile	Pro Leu Trp Ile Tyr	Ser Leu Lys Thr Leu	Glu	
	245	250	255	
Glu Leu His Leu	Thr Gly Asn Leu Ser	Ala Glu Asn Asn Arg	Tyr	
	260	265	270	
Ile Val Ile Asp	Gly Leu Arg Glu Leu	Lys Arg Leu Lys Val	Leu	
	275	280	285	
Arg Leu Lys Ser	Asn Leu Ser Lys Leu	Pro Gln Val Val Thr	Asp	
	290	295	300	
Val Gly Val His	Leu Gln Lys Leu Ser	Ile Asn Asn Glu Gly	Thr	
	305	310	315	
Lys Leu Ile Val	Leu Asn Ser Leu Lys	Lys Met Ala Asn Leu	Thr	
	320	325	330	
Glu Leu Glu Leu	Ile Arg Cys Asp Leu	Glu Arg Ile Pro His	Ser	
	335	340	345	
Ile Phe Ser Leu	His Asn Leu Gln Glu	Ile Asp Leu Lys Asp	Asn	
	350	355	360	
Asn Leu Lys Thr	Ile Glu Glu Ile Ile	Ser Phe Gln His Leu	His	
	365	370	375	
Arg Leu Thr Cys	Leu Lys Leu Trp Tyr	Asn His Ile Ala Tyr	Ile	
	380	385	390	
Pro Ile Gln Ile	Gly Asn Leu Thr Asn	Leu Glu Arg Leu Tyr	Leu	
	395	400	405	
Asn Arg Asn Lys	Ile Glu Lys Ile Pro	Thr Gln Leu Phe Tyr	Cys	
	410	415	420	
Arg Lys Leu Arg	Tyr Leu Asp Leu Ser	His Asn Asn Leu Thr	Phe	
	425	430	435	
Leu Pro Ala Asp	Ile Gly Leu Leu Gln	Asn Leu Gln Asn Leu	Ala	
	440	445	450	
Ile Thr Ala Asn	Arg Ile Glu Thr Leu	Pro Pro Glu Leu Phe	Gln	
	455	460	465	
Cys Arg Lys Leu	Arg Ala Leu His Leu	Gly Asn Asn Val Leu	Gln	
	470	475	480	

P1618P2C2 sequence listing.txt

Ser	Leu	Pro	Ser	Arg	Val	Gly	Glu	Leu	Thr	Asn	Leu	Thr	Gln	Ile
				485					490					495
Glu	Leu	Arg	Gly	Asn	Arg	Leu	Glu	Cys	Leu	Pro	Val	Glu	Leu	Gly
				500					505					510
Glu	Cys	Pro	Leu	Leu	Lys	Arg	Ser	Gly	Leu	Val	Val	Glu	Glu	Asp
				515					520					525
Leu	Phe	Asn	Thr	Leu	Pro	Pro	Glu	Val	Lys	Glu	Arg	Leu	Trp	Arg
				530					535					540
Ala	Asp	Lys	Glu	Gln	Ala									
				545										

<210> 251  
 <211> 20  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Synthetic Oligonucleotide Probe

<400> 251  
 caacaatgag ggcaccaagc 20

<210> 252  
 <211> 24  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Synthetic Oligonucleotide Probe

<400> 252  
 gatggctagg ttctggaggt tctg 24

<210> 253  
 <211> 47  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Synthetic Oligonucleotide Probe

<400> 253  
 caacctgcag gagattgacc tcaaggacaa caacctcaag accatcg 47

<210> 254  
 <211> 1650  
 <212> DNA  
 <213> Homo Sapien

<400> 254  
 gcctgttgct gatgctgccg tgcggtactt gtcattggagc tggcactgcg 50  
 gcgctctccc gtcccgcggt ggttgctgct gctgccgctg ctgctgggccc 100  
 tgaacgcagg agctgtcatt gactggccca cagaggaggg caaggaagta 150  
 tgggattatg tgacgggtccg caaggatgcc tacatgttct ggtggctcta 200

P1618P2C2 sequence listing.txt

```

ttatgccacc aactcctgca agaacttctc agaactgccc ctggtcatgt 250
ggcttcaggg cggtccaggc ggttctagca ctggatttgg aaactttgag 300
gaaattgggc cccttgacag tgatctcaaa ccacggaaaa ccacctggct 350
ccaggctgcc agtctcctat ttgtggataa tcccgtgggc actgggttca 400
gttatgtgaa tggtagtggt gcctatgcca aggacctggc tatggtggct 450
tcagacatga tggttctcct gaagaccttc ttcagttgcc acaaagaatt 500
ccagacagtt ccattctaca ttttctcaga gtcctatgga ggaaaaatgg 550
cagctggcat tggctagag ctttataagg ccattcagcg agggaccatc 600
aagtgcaact ttgcgggggt tgccttgggt gattcctgga tctcccctgt 650
tgattcggtg ctctcctggg gaccttacct gtacagcatg tctcttctcg 700
aagacaaagg tctggcagag gtgtctaagg ttgcagagca agtactgaat 750
gccgtaaata aggggctcta cagagaggcc acagagctgt gggggaaagc 800
agaaatgatac attgaacaga acacagatgg ggtgaacttc tataacatct 850
taactaaaag cactcccacg tctacaatgg agtcgagtct agaattcaca 900
cagagccacc tagtttgtct ttgtcagcgc cacgtgagac acctacaacg 950
agatgcctta agccagctca tgaatggccc catcagaaag aagctcaaaa 1000
ttattcctga ggatcaatcc tggggaggcc aggctaccaa cgtctttgtg 1050
aacatggagg aggacttcat gaagccagtc attagcattg tggacgagtt 1100
gctggaggca gggatcaacg tgacggtgta taatggacag ctggatctca 1150
tcgtagatac catgggtcag gaggcctggg tgcggaaact gaagtggcca 1200
gaactgccta aattcagtca gctgaagtgg aaggccctgt acagtgaccc 1250
taaactcttg gaaacatctg cttttgtcaa gtcctacaag aaccttgctt 1300
tctactggat tctgaaagct ggtcatatgg ttccttctga ccaaggggac 1350
atggctctga agatgatgag actggtgact cagcaagaat aggatggatg 1400
gggctggaga tgagctgggt tggccttggg gcacagagct gagctgaggc 1450
cgctgaagct gtaggaagcg ccattcttcc ctgtatctaa ctggggctgt 1500
gatcaagaag gttctgacca gcttctgcag aggataaaat cattgtctct 1550
ggaggcaatt tggaaattat ttctgcttct taaaaaaacc taagattttt 1600
taaaaaattg atttgttttg atcaaaataa aggatgataa tagatattaa 1650

```

<210> 255

<211> 452

<212> PRT

<213> Homo Sapien



P1618P2C2 sequence listing.txt

<400> 255

```

Met Glu Leu Ala Leu Arg Arg Ser Pro Val Pro Arg Trp Leu Leu
 1      5      10      15
Leu Leu Pro Leu Leu Leu Gly Leu Asn Ala Gly Ala Val Ile Asp
      20      25      30
Trp Pro Thr Glu Glu Gly Lys Glu Val Trp Asp Tyr Val Thr Val
      35      40      45
Arg Lys Asp Ala Tyr Met Phe Trp Trp Leu Tyr Tyr Ala Thr Asn
      50      55      60
Ser Cys Lys Asn Phe Ser Glu Leu Pro Leu Val Met Trp Leu Gln
      65      70      75
Gly Gly Pro Gly Gly Ser Ser Thr Gly Phe Gly Asn Phe Glu Glu
      80      85      90
Ile Gly Pro Leu Asp Ser Asp Leu Lys Pro Arg Lys Thr Thr Trp
      95     100     105
Leu Gln Ala Ala Ser Leu Leu Phe Val Asp Asn Pro Val Gly Thr
     110     115     120
Gly Phe Ser Tyr Val Asn Gly Ser Gly Ala Tyr Ala Lys Asp Leu
     125     130     135
Ala Met Val Ala Ser Asp Met Met Val Leu Leu Lys Thr Phe Phe
     140     145     150
Ser Cys His Lys Glu Phe Gln Thr Val Pro Phe Tyr Ile Phe Ser
     155     160     165
Glu Ser Tyr Gly Gly Lys Met Ala Ala Gly Ile Gly Leu Glu Leu
     170     175     180
Tyr Lys Ala Ile Gln Arg Gly Thr Ile Lys Cys Asn Phe Ala Gly
     185     190     195
Val Ala Leu Gly Asp Ser Trp Ile Ser Pro Val Asp Ser Val Leu
     200     205     210
Ser Trp Gly Pro Tyr Leu Tyr Ser Met Ser Leu Leu Glu Asp Lys
     215     220     225
Gly Leu Ala Glu Val Ser Lys Val Ala Glu Gln Val Leu Asn Ala
     230     235     240
Val Asn Lys Gly Leu Tyr Arg Glu Ala Thr Glu Leu Trp Gly Lys
     245     250     255
Ala Glu Met Ile Ile Glu Gln Asn Thr Asp Gly Val Asn Phe Tyr
     260     265     270
Asn Ile Leu Thr Lys Ser Thr Pro Thr Ser Thr Met Glu Ser Ser
     275     280     285
Leu Glu Phe Thr Gln Ser His Leu Val Cys Leu Cys Gln Arg His
     290     295     300
Val Arg His Leu Gln Arg Asp Ala Leu Ser Gln Leu Met Asn Gly
     305     310     315

```

P1618P2C2 sequence listing.txt

Pro	Ile	Arg	Lys	Lys	Leu	Lys	Ile	Ile	Pro	Glu	Asp	Gln	Ser	Trp
				320					325					330
Gly	Gly	Gln	Ala	Thr	Asn	Val	Phe	Val	Asn	Met	Glu	Glu	Asp	Phe
				335					340					345
Met	Lys	Pro	Val	Ile	Ser	Ile	Val	Asp	Glu	Leu	Leu	Glu	Ala	Gly
				350					355					360
Ile	Asn	Val	Thr	Val	Tyr	Asn	Gly	Gln	Leu	Asp	Leu	Ile	Val	Asp
				365					370					375
Thr	Met	Gly	Gln	Glu	Ala	Trp	Val	Arg	Lys	Leu	Lys	Trp	Pro	Glu
				380					385					390
Leu	Pro	Lys	Phe	Ser	Gln	Leu	Lys	Trp	Lys	Ala	Leu	Tyr	Ser	Asp
				395					400					405
Pro	Lys	Ser	Leu	Glu	Thr	Ser	Ala	Phe	Val	Lys	Ser	Tyr	Lys	Asn
				410					415					420
Leu	Ala	Phe	Tyr	Trp	Ile	Leu	Lys	Ala	Gly	His	Met	Val	Pro	Ser
				425					430					435
Asp	Gln	Gly	Asp	Met	Ala	Leu	Lys	Met	Met	Arg	Leu	Val	Thr	Gln
				440					445					450

Gln Glu

<210> 256  
 <211> 1100  
 <212> DNA  
 <213> Homo Sapien

<400> 256  
 ggccgcggga gaggaggcca tgggcgcgcg cggggcgctg ctgctggcgc 50  
 tgctgctggc tcgggctgga ctcaggaagc cggagtcgca ggaggcggcg 100  
 ccgttatcag gaccatgcgg ccgacgggtc atcacgtcgc gcatcgtggg 150  
 tggagaggac gccgaactcg ggcgttgccc gtggcagggg agcctgcgcc 200  
 tgtgggattc ccacgtatgc ggagtgaacc tgctcagcca ccgctgggca 250  
 ctcacggcgg cgcactgctt tgaaacctat agtgacctta gtgatccctc 300  
 cgggtggatg gtccagtttg gccagctgac ttccatgcca tccttctgga 350  
 gcctgcaggc ctactacacc cgttacttcg tatcgaatat ctatctgagc 400  
 cctcgtacc tggggaattc accctatgac attgccttgg tgaagctgtc 450  
 tgcacctgtc acctacacta aacacatcca gcccatctgt ctccaggcct 500  
 ccacatttga gtttgagaac cggacagact gctgggtgac tggctggggg 550  
 tacatcaaag aggatgaggc actgccatct cccacaccc tccaggaagt 600  
 tcaggtcgcc atcataaaca actctatgtg caaccacctc ttcctcaagt 650

P1618P2C2 sequence listing.txt

acagtttccg caaggacatc ttggagaca tggtttgtgc tggcaacgcc 700  
 caaggcggga aggatgcctg cttcgggtgac tcaggtggac ctttggcctg 750  
 taacaagaat ggactgtggt atcagattgg agtcgtgagc tggggagtgg 800  
 gctgtggtcg gcccaatcgg cccgggtgtct acaccaatat cagccaccac 850  
 tttgagtggg tccagaagct gatggcccag agtggcatgt cccagccaga 900  
 cccctcctgg ccactactct ttttccctct tctctgggct ctcccactcc 950  
 tggggccggt ctgagcctac ctgagcccat gcagcctggg gccactgcca 1000  
 agtcaggccc tggttctctt ctgtcttggt tggtataaaa cacattccag 1050  
 ttgatgcctt gcagggcatt cttcaaaaaa aaaaaaaaaa aaaaaaaaaa 1100

<210> 257  
 <211> 314  
 <212> PRT  
 <213> Homo Sapien

<400> 257  
 Met Gly Ala Arg Gly Ala Leu Leu Leu Ala Leu Leu Leu Ala Arg  
 1 5 10 15  
 Ala Gly Leu Arg Lys Pro Glu Ser Gln Glu Ala Ala Pro Leu Ser  
 20 25 30  
 Gly Pro Cys Gly Arg Arg Val Ile Thr Ser Arg Ile Val Gly Gly  
 35 40 45  
 Glu Asp Ala Glu Leu Gly Arg Trp Pro Trp Gln Gly Ser Leu Arg  
 50 55 60  
 Leu Trp Asp Ser His Val Cys Gly Val Ser Leu Leu Ser His Arg  
 65 70 75  
 Trp Ala Leu Thr Ala Ala His Cys Phe Glu Thr Tyr Ser Asp Leu  
 80 85 90  
 Ser Asp Pro Ser Gly Trp Met Val Gln Phe Gly Gln Leu Thr Ser  
 95 100 105  
 Met Pro Ser Phe Trp Ser Leu Gln Ala Tyr Tyr Thr Arg Tyr Phe  
 110 115 120  
 Val Ser Asn Ile Tyr Leu Ser Pro Arg Tyr Leu Gly Asn Ser Pro  
 125 130 135  
 Tyr Asp Ile Ala Leu Val Lys Leu Ser Ala Pro Val Thr Tyr Thr  
 140 145 150  
 Lys His Ile Gln Pro Ile Cys Leu Gln Ala Ser Thr Phe Glu Phe  
 155 160 165  
 Glu Asn Arg Thr Asp Cys Trp Val Thr Gly Trp Gly Tyr Ile Lys  
 170 175 180  
 Glu Asp Glu Ala Leu Pro Ser Pro His Thr Leu Gln Glu Val Gln  
 185 190 195

P1618P2C2 sequence listing.txt

Val	Ala	Ile	Ile	Asn	Asn	Ser	Met	Cys	Asn	His	Leu	Phe	Leu	Lys
				200					205					210
Tyr	Ser	Phe	Arg	Lys	Asp	Ile	Phe	Gly	Asp	Met	Val	Cys	Ala	Gly
				215					220					225
Asn	Ala	Gln	Gly	Gly	Lys	Asp	Ala	Cys	Phe	Gly	Asp	Ser	Gly	Gly
				230					235					240
Pro	Leu	Ala	Cys	Asn	Lys	Asn	Gly	Leu	Trp	Tyr	Gln	Ile	Gly	Val
				245					250					255
Val	Ser	Trp	Gly	Val	Gly	Cys	Gly	Arg	Pro	Asn	Arg	Pro	Gly	Val
				260					265					270
Tyr	Thr	Asn	Ile	Ser	His	His	Phe	Glu	Trp	Ile	Gln	Lys	Leu	Met
				275					280					285
Ala	Gln	Ser	Gly	Met	Ser	Gln	Pro	Asp	Pro	Ser	Trp	Pro	Leu	Leu
				290					295					300
Phe	Phe	Pro	Leu	Leu	Trp	Ala	Leu	Pro	Leu	Leu	Gly	Pro	Val	
				305					310					

<210> 258  
 <211> 2427  
 <212> DNA  
 <213> Homo Sapien

<400> 258  
 cccacgcgtc cgcggacgcg tgggaagggc agaatgggac tccaagcctg 50  
 cctcctaggg ctctttgccc tcctcctctc tggcaaatgc agttacagcc 100  
 cggagcccga ccagcggagg acgctgcccc caggctgggt gtccttgggc 150  
 cgtgcggacc ctgaggaaga gctgagtctc acctttgccc tgagacagca 200  
 gaatgtggaa agactctcgg agctggtgca ggctgtgtcg gatcccagct 250  
 ctctcaata cggaataac ctgaccctag agaatgtggc tgatctggtg 300  
 aggccatccc cactgaccct ccacacggtg caaaaatggc tcttggcagc 350  
 cggagcccag aagtgccatt ctgtgatcac acaggacttt ctgacttgct 400  
 ggctgagcat ccgacaagca gagctgctgc tccctggggc tgagtttcat 450  
 cactatgtgg gaggacctac ggaaacccat gttgtaaggc cccacatcc 500  
 ctaccagctt ccacaggcct tggccccca tgtggacttt gtggggggac 550  
 tgcaccgttt tcccccaaca tcctcctga ggcaacgtcc tgagccgcag 600  
 gtgacagga ctgtaggcct gcatctgggg gtaacccct ctgtgatccg 650  
 taagcgatac aacttgacct cacaagacgt gggctctggc accagcaata 700  
 acagccaagc ctgtgcccag ttcctggagc agtatttcca tgactcagac 750  
 ctggctcagt tcatgcgcct cttcgggtggc aactttgcac atcaggcatc 800  
 agtagcccg gtggttgac aacagggccg gggccgggccc gggattgagg 850

P1618P2C2 sequence listing.txt

ccagtctaga tgtgcagtag ctgatgagtg ctggtgccaa catctccacc 900  
 tgggtctaca gtagccctgg ccggcatgag ggacaggagc ccttcctgca 950  
 gtggctcatg ctgctcagta atgagtcagc cctgccacat gtgcatactg 1000  
 tgagctatgg agatgatgag gactccctca gcagcgccta catccagcgg 1050  
 gtcaacactg agctcatgaa ggctgccgct cgggggtctca ccctgctctt 1100  
 cgcctcaggt gacagtgggg ccgggtgttg gtctgtctct ggaagacacc 1150  
 agttccgccc taccttcctt gcctccagcc cctatgtcac cacagtggga 1200  
 ggcacatcct tccaggaacc tttcctcatc acaaataaaa ttgttgacta 1250  
 tatcagtggg ggtggcttca gcaatgtgtt cccacggcct tcataccagg 1300  
 aggaagctgt aacgaagttc ctgagctcta gccccacct gccaccatcc 1350  
 agttacttca atgccagtg ccgtgcctac ccagatgtgg ctgcactttc 1400  
 tgatggctac tgggtgtgca gcaacagagt gccattcca tgggtgtccg 1450  
 gaacctcggc ctctactcca gtgtttgggg ggatcctatc cttgatcaat 1500  
 gagcacagga tccttagtgg ccgccccctt cttggctttc tcaaccaag 1550  
 gctctaccag cagcatgggg caggtctctt tgatgtaacc cgtggctgcc 1600  
 atgagtcctg tctggatgaa gaggtagagg gccagggttt ctgctctggg 1650  
 cctggctggg atcctgtaac aggttgggga acaccaactt cccagctttg 1700  
 ctgaagactc tactcaacct ctgacccttt cctatcagga gagatggctt 1750  
 gtccccctgc ctgaagctgg cagttcagtc ccttattctg ccctgttggg 1800  
 agccctgctg aacctcaac tattgactgc tgcagacagc ttatctccct 1850  
 aacctgaaa tgctgtgagc ttgacttgac tcccaaccct accatgctcc 1900  
 atcactacta ggtctcccta ctctgcctt agattcctca ataagatgct 1950  
 gtaactagca ttttttgaat gcctctccct ccgcatctca tctttctctt 2000  
 ttcaatcagg cttttccaaa gggttgtata cagactctgt gcactatttc 2050  
 acttgatatt cattcccaa ttcactgcaa ggagacctct actgtcaccg 2100  
 ttactcttt cctaccctga catccagaaa caatggcctc cagtgcatac 2150  
 ttctcaatct ttgctttatg gcctttccat catagttgcc cactccctct 2200  
 cttacttag ctccagggtc ttaacttctc tgactactct tgtcttctc 2250  
 tctcatcaat ttctgcttct tcatggaatg ctgaccttca ttgctccatt 2300  
 tgtagathtt tgctcttctc agtttactca ttgtcccctg gaacaaatca 2350  
 ctgacatcta caaccattac catctcacta aataagactt tctatccaat 2400

P1618P2C2 sequence listing.txt  
aatgattgat acctcaaagt taaaaaa 2427

<210> 259  
<211> 556  
<212> PRT  
<213> Homo Sapien

<400> 259  
Met Gly Leu Gln Ala Cys Leu Leu Gly Leu Phe Ala Leu Ile Leu  
1 5 10 15  
Ser Gly Lys Cys Ser Tyr Ser Pro Glu Pro Asp Gln Arg Arg Thr  
20 25 30  
Leu Pro Pro Gly Trp Val Ser Leu Gly Arg Ala Asp Pro Glu Glu  
35 40 45  
Glu Leu Ser Leu Thr Phe Ala Leu Arg Gln Gln Asn Val Glu Arg  
50 55 60  
Leu Ser Glu Leu Val Gln Ala Val Ser Asp Pro Ser Ser Pro Gln  
65 70 75  
Tyr Gly Lys Tyr Leu Thr Leu Glu Asn Val Ala Asp Leu Val Arg  
80 85 90  
Pro Ser Pro Leu Thr Leu His Thr Val Gln Lys Trp Leu Leu Ala  
95 100 105  
Ala Gly Ala Gln Lys Cys His Ser Val Ile Thr Gln Asp Phe Leu  
110 115 120  
Thr Cys Trp Leu Ser Ile Arg Gln Ala Glu Leu Leu Leu Pro Gly  
125 130 135  
Ala Glu Phe His His Tyr Val Gly Gly Pro Thr Glu Thr His Val  
140 145 150  
Val Arg Ser Pro His Pro Tyr Gln Leu Pro Gln Ala Leu Ala Pro  
155 160 165  
His Val Asp Phe Val Gly Gly Leu His Arg Phe Pro Pro Thr Ser  
170 175 180  
Ser Leu Arg Gln Arg Pro Glu Pro Gln Val Thr Gly Thr Val Gly  
185 190 195  
Leu His Leu Gly Val Thr Pro Ser Val Ile Arg Lys Arg Tyr Asn  
200 205 210  
Leu Thr Ser Gln Asp Val Gly Ser Gly Thr Ser Asn Asn Ser Gln  
215 220 225  
Ala Cys Ala Gln Phe Leu Glu Gln Tyr Phe His Asp Ser Asp Leu  
230 235 240  
Ala Gln Phe Met Arg Leu Phe Gly Gly Asn Phe Ala His Gln Ala  
245 250 255  
Ser Val Ala Arg Val Val Gly Gln Gln Gly Arg Gly Arg Ala Gly  
260 265 270  
Ile Glu Ala Ser Leu Asp Val Gln Tyr Leu Met Ser Ala Gly Ala

P1618P2C2 sequence listing.txt

275		280		285
Asn Ile Ser Thr	Trp Val Tyr Ser Ser	Pro Gly Arg His Glu	Gly	
290		295	300	
Gln Glu Pro Phe	Leu Gln Trp Leu Met	Leu Leu Ser Asn Glu	Ser	
305		310	315	
Ala Leu Pro His	Val His Thr Val Ser	Tyr Gly Asp Asp Glu	Asp	
320		325	330	
Ser Leu Ser Ser	Ala Tyr Ile Gln Arg	Val Asn Thr Glu Leu	Met	
335		340	345	
Lys Ala Ala Ala	Arg Gly Leu Thr Leu	Leu Phe Ala Ser Gly	Asp	
350		355	360	
Ser Gly Ala Gly	Cys Trp Ser Val Ser	Gly Arg His Gln Phe	Arg	
365		370	375	
Pro Thr Phe Pro	Ala Ser Ser Pro Tyr	Val Thr Thr Val Gly	Gly	
380		385	390	
Thr Ser Phe Gln	Glu Pro Phe Leu Ile	Thr Asn Glu Ile Val	Asp	
395		400	405	
Tyr Ile Ser Gly	Gly Gly Phe Ser Asn	Val Phe Pro Arg Pro	Ser	
410		415	420	
Tyr Gln Glu Glu	Ala Val Thr Lys Phe	Leu Ser Ser Ser Pro	His	
425		430	435	
Leu Pro Pro Ser	Ser Tyr Phe Asn Ala	Ser Gly Arg Ala Tyr	Pro	
440		445	450	
Asp Val Ala Ala	Leu Ser Asp Gly Tyr	Trp Val Val Ser Asn	Arg	
455		460	465	
Val Pro Ile Pro	Trp Val Ser Gly Thr	Ser Ala Ser Thr Pro	Val	
470		475	480	
Phe Gly Gly Ile	Leu Ser Leu Ile Asn	Glu His Arg Ile Leu	Ser	
485		490	495	
Gly Arg Pro Pro	Leu Gly Phe Leu Asn	Pro Arg Leu Tyr Gln	Gln	
500		505	510	
His Gly Ala Gly	Leu Phe Asp Val Thr	Arg Gly Cys His Glu	Ser	
515		520	525	
Cys Leu Asp Glu	Glu Val Glu Gly Gln	Gly Phe Cys Ser Gly	Pro	
530		535	540	
Gly Trp Asp Pro	Val Thr Gly Trp Gly	Thr Pro Thr Ser Gln	Leu	
545		550	555	

Cys

<210> 260  
 <211> 1638  
 <212> DNA  
 <213> Homo Sapien

P1618P2C2 sequence listing.txt

<400> 260

```

gccgcgcgct ctctcccggc gcccacacct gtctgagcgg cgcagcgagc 50
cgcgccccgg gcgggctgct cggcgcgga cagtgtctcg catggcaggg 100
attccagggc tcctcttcct tctcttcttt ctgctctgtg ctgttgggca 150
agtgagccct tacagtgcc cctggaaacc cacttggcct gcataccgcc 200
tccctgtcgt cttgccccag tctaccctca atttagccaa gccagacttt 250
ggagccgaag ccaaattaga agtatcttct tcatgtggac cccagtgtca 300
taagggaaact cactgcccc cttacgaaga ggccaagcaa tatctgtctt 350
atgaaacgct ctatgccaat ggcagccgca cagagacgca ggtgggcatc 400
tacatcctca gcagtagtgg agatggggcc caacaccgag actcagggtc 450
ttcaggaaag tctcgaagga agcggcagat ttatggctat gacagcaggt 500
tcagcatttt tgggaaggac ttcctgtctc actacccttt ctcaacatca 550
gtgaagttat ccacgggctg caccggcacc ctggtggcag agaagcatgt 600
cctcacagct gccactgca tacacgatgg aaaaacctat gtgaaaggaa 650
cccagaagct tcgagtgggc ttcctaaagc ccaagtttaa agatggtggt 700
cgaggggcca acgactccac ttcagccatg cccgagcaga tgaaatttca 750
gtggatccgg gtgaaacgca cccatgtgcc caagggttgg atcaagggca 800
atgccaatga catcggcag gattatgatt atgccctcct ggaactcaaa 850
aagccccaca agagaaaatt tatgaagatt ggggtgagcc ctcttgctaa 900
gcagctgcca gggggcagaa ttcacttctc tggttatgac aatgaccgac 950
caggcaatth ggtgtatcgc ttctgtgacg tcaaagacga gacctatgac 1000
ttgtcttacc agcaatgcga tgcccagcca ggggccagcg ggtctggggg 1050
ctatgtgagg atgtggaaga gacagcagca gaagtgggag cgaaaaatta 1100
ttggcatttt ttcagggcac cagtgggtgg acatgaatgg ttccccacag 1150
gatttcaacg tggctgtcag aatcactcct ctcaaatatg cccagatttg 1200
ctattggatt aaaggaaact acctggattg tagggagggg tgacacagt 1250
ttccctcctg gcagcaatta agggcttcca tgttcttatt ttaggagagg 1300
ccaaattggt ttttgtcatt ggcgtgcaca cgtgtgtgtg tgtgtgtgtg 1350
tgtgtgtaag gtgtcttata atcttttacc tatttcttac aattgcaaga 1400
tgactggctt tactatttga aaactggttt gtgtatcata tcatatatca 1450
tttaagcagt ttgaaggcat acttttgcag agaaataaaa aaaatactga 1500
tttggggcaa tgaggaatat ttgacaatta agttaatctt cacgtttttg 1550

```



P1618P2C2 sequence listing.txt

caaactttga tttttatttc atctgaactt gtttcaaaga tttatattaa 1600  
atatttggca tacaagagat atgaaaaaaa aaaaaaaa 1638

<210> 261  
<211> 383  
<212> PRT  
<213> Homo Sapien

<400> 261  
Met Ala Gly Ile Pro Gly Leu Leu Phe Leu Leu Phe Phe Leu Leu  
1 5 10 15  
Cys Ala Val Gly Gln Val Ser Pro Tyr Ser Ala Pro Trp Lys Pro  
20 25 30  
Thr Trp Pro Ala Tyr Arg Leu Pro Val Val Leu Pro Gln Ser Thr  
35 40 45  
Leu Asn Leu Ala Lys Pro Asp Phe Gly Ala Glu Ala Lys Leu Glu  
50 55 60  
Val Ser Ser Ser Cys Gly Pro Gln Cys His Lys Gly Thr Pro Leu  
65 70 75  
Pro Thr Tyr Glu Glu Ala Lys Gln Tyr Leu Ser Tyr Glu Thr Leu  
80 85 90  
Tyr Ala Asn Gly Ser Arg Thr Glu Thr Gln Val Gly Ile Tyr Ile  
95 100 105  
Leu Ser Ser Ser Gly Asp Gly Ala Gln His Arg Asp Ser Gly Ser  
110 115 120  
Ser Gly Lys Ser Arg Arg Lys Arg Gln Ile Tyr Gly Tyr Asp Ser  
125 130 135  
Arg Phe Ser Ile Phe Gly Lys Asp Phe Leu Leu Asn Tyr Pro Phe  
140 145 150  
Ser Thr Ser Val Lys Leu Ser Thr Gly Cys Thr Gly Thr Leu Val  
155 160 165  
Ala Glu Lys His Val Leu Thr Ala Ala His Cys Ile His Asp Gly  
170 175 180  
Lys Thr Tyr Val Lys Gly Thr Gln Lys Leu Arg Val Gly Phe Leu  
185 190 195  
Lys Pro Lys Phe Lys Asp Gly Gly Arg Gly Ala Asn Asp Ser Thr  
200 205 210  
Ser Ala Met Pro Glu Gln Met Lys Phe Gln Trp Ile Arg Val Lys  
215 220 225  
Arg Thr His Val Pro Lys Gly Trp Ile Lys Gly Asn Ala Asn Asp  
230 235 240  
Ile Gly Met Asp Tyr Asp Tyr Ala Leu Leu Glu Leu Lys Lys Pro  
245 250 255  
His Lys Arg Lys Phe Met Lys Ile Gly Val Ser Pro Pro Ala Lys

P1618P2C2 sequence listing.txt

260		265		270
Gln Leu Pro Gly	Gly Arg Ile His Phe	Ser Gly Tyr Asp Asn	Asp	
275		280	285	
Arg Pro Gly Asn	Leu Val Tyr Arg Phe	Cys Asp Val Lys Asp	Glu	
290		295	300	
Thr Tyr Asp Leu	Leu Tyr Gln Gln Cys	Asp Ala Gln Pro Gly	Ala	
305		310	315	
Ser Gly Ser Gly	Val Tyr Val Arg Met	Trp Lys Arg Gln Gln	Gln	
320		325	330	
Lys Trp Glu Arg	Lys Ile Ile Gly Ile	Phe Ser Gly His Gln	Trp	
335		340	345	
Val Asp Met Asn	Gly Ser Pro Gln Asp	Phe Asn Val Ala Val	Arg	
350		355	360	
Ile Thr Pro Leu	Lys Tyr Ala Gln Ile	Cys Tyr Trp Ile Lys	Gly	
365		370	375	
Asn Tyr Leu Asp	Cys Arg Glu Gly			
380				

<210> 262  
 <211> 1378  
 <212> DNA  
 <213> Homo Sapien

<400> 262  
 gcatcgccct ggggtctctcg agcctgctgc ctgctcccc gccccaccag 50  
 ccatgggtggt ttctggagcg cccccagccc tgggtggggg ctgtctcggc 100  
 accttcacct ccctgctgct gctggcgctg acagccatcc tcaatgcggc 150  
 caggatacct gttccccag cctgtgggaa gccccagcag ctgaaccggg 200  
 ttgtgggagg cgaggacagc actgacagcg agtggccctg gatcgtgagc 250  
 atccagaaga atgggaccca cactgagca ggttctctgc tcaccagccg 300  
 ctgggtgatc actgctgcc actgtttcaa ggacaacctg aacaaaccat 350  
 acctgttctc tgtgctgctg ggggcctggc agctggggaa ccctggctct 400  
 cgggtcccaga aggtgggtgt tgcctgggtg gagccccacc ctgtgtattc 450  
 ctggaaggaa ggtgcctgtg cagacattgc cctggtgcgt ctcgagcgct 500  
 ccatacagtt ctgagagcgg gtcctgcca tctgcctacc tgatgcctct 550  
 atccacctcc ctcaaacac cactgctgg atctcaggct gggggagcat 600  
 ccaagatgga gttcccttgc cccaccctca gaccctgcag aagctgaagg 650  
 ttcttatcat cgactcggaa gtctgcagcc atctgtactg gcggggagca 700  
 ggacagggac ccatactga ggacatgctg tgtgccggct acttgagggg 750  
 ggagcgggat gcttgtctgg gcgactccgg gggccccctc atgtgccagg 800

P1618P2C2 sequence listing.txt

tggacggcgc ctggctgctg gccggcatca tcagctgggg cgagggctgt 850  
 gccgagcgca acaggcccg ggtctacatc agcctctctg cgcaccgctc 900  
 ctgggtggag aagatcgtgc aaggggtgca gctccgcggg cgcgctcagg 950  
 ggggtggggc cctcagggca ccgagccagg gctctggggc cgccgcgcgc 1000  
 tcctagggcg cagcgggacg cggggctcgg atctgaaagg cggccagatc 1050  
 cacatctgga tctggatctg cggcggcctc gggcggtttc ccccgccgta 1100  
 aataggctca tctacctcta cctctggggg cccggacggc tgctgcggaa 1150  
 aggaaacccc ctccccgacc cgcccgacgg cctcaggccc ccctccaagg 1200  
 catcaggccc cgcccaacgg cctcatgtcc ccgccccac gacttccggc 1250  
 cccgcccccg ggccccagcg cttttgtgta tataaatgtt aatgattttt 1300  
 ataggtatatt gtaaccctgc ccacatatct tattttattcc tccaatttca 1350  
 ataaattatt tattctccaa aaaaaaaaa 1378

<210> 263  
 <211> 317  
 <212> PRT  
 <213> Homo Sapien

<400> 263  
 Met Val Val Ser Gly Ala Pro Pro Ala Leu Gly Gly Gly Cys Leu  
 1 5 10 15  
 Gly Thr Phe Thr Ser Leu Leu Leu Leu Ala Ser Thr Ala Ile Leu  
 20 25 30  
 Asn Ala Ala Arg Ile Pro Val Pro Pro Ala Cys Gly Lys Pro Gln  
 35 40 45  
 Gln Leu Asn Arg Val Val Gly Gly Glu Asp Ser Thr Asp Ser Glu  
 50 55 60  
 Trp Pro Trp Ile Val Ser Ile Gln Lys Asn Gly Thr His His Cys  
 65 70 75  
 Ala Gly Ser Leu Leu Thr Ser Arg Trp Val Ile Thr Ala Ala His  
 80 85 90  
 Cys Phe Lys Asp Asn Leu Asn Lys Pro Tyr Leu Phe Ser Val Leu  
 95 100 105  
 Leu Gly Ala Trp Gln Leu Gly Asn Pro Gly Ser Arg Ser Gln Lys  
 110 115 120  
 Val Gly Val Ala Trp Val Glu Pro His Pro Val Tyr Ser Trp Lys  
 125 130 135  
 Glu Gly Ala Cys Ala Asp Ile Ala Leu Val Arg Leu Glu Arg Ser  
 140 145 150  
 Ile Gln Phe Ser Glu Arg Val Leu Pro Ile Cys Leu Pro Asp Ala  
 155 160 165

p1618P2C2 sequence listing.txt

Ser	Ile	His	Leu	Pro	Pro	Asn	Thr	His	Cys	Trp	Ile	Ser	Gly	Trp
				170					175					180
Gly	Ser	Ile	Gln	Asp	Gly	Val	Pro	Leu	Pro	His	Pro	Gln	Thr	Leu
				185					190					195
Gln	Lys	Leu	Lys	Val	Pro	Ile	Ile	Asp	Ser	Glu	Val	Cys	Ser	His
				200					205					210
Leu	Tyr	Trp	Arg	Gly	Ala	Gly	Gln	Gly	Pro	Ile	Thr	Glu	Asp	Met
				215					220					225
Leu	Cys	Ala	Gly	Tyr	Leu	Glu	Gly	Glu	Arg	Asp	Ala	Cys	Leu	Gly
				230					235					240
Asp	Ser	Gly	Gly	Pro	Leu	Met	Cys	Gln	Val	Asp	Gly	Ala	Trp	Leu
				245					250					255
Leu	Ala	Gly	Ile	Ile	Ser	Trp	Gly	Glu	Gly	Cys	Ala	Glu	Arg	Asn
				260					265					270
Arg	Pro	Gly	Val	Tyr	Ile	Ser	Leu	Ser	Ala	His	Arg	Ser	Trp	Val
				275					280					285
Glu	Lys	Ile	Val	Gln	Gly	Val	Gln	Leu	Arg	Gly	Arg	Ala	Gln	Gly
				290					295					300
Gly	Gly	Ala	Leu	Arg	Ala	Pro	Ser	Gln	Gly	Ser	Gly	Ala	Ala	Ala
				305					310					315

Arg Ser

<210> 264  
 <211> 24  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Synthetic Oligonucleotide Probe

<400> 264  
 gtccgcaagg atgcctacat gttc 24

<210> 265  
 <211> 19  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Synthetic Oligonucleotide Probe

<400> 265  
 gcagaggtgt ctaaggttg 19

<210> 266  
 <211> 24  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Synthetic Oligonucleotide Probe

P1618P2C2 sequence listing.txt

<400> 266  
agctctagac caatgccagc ttcc 24

<210> 267  
<211> 45  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Synthetic Oligonucleotide Probe

<400> 267  
gccaccaact cctgcaagaa cttctcagaa ctgcccctgg tcatg 45

<210> 268  
<211> 25  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Synthetic Oligonucleotide Probe

<400> 268  
ggggaattca ccctatgaca ttgcc 25

<210> 269  
<211> 24  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Synthetic Oligonucleotide Probe

<400> 269  
gaatgccctg caagcatcaa ctgg 24

<210> 270  
<211> 50  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Synthetic Oligonucleotide Probe

<400> 270  
gcacctgtca cctacactaa acacatccag cccatctgtc tccaggcctc 50

<210> 271  
<211> 26  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Synthetic Oligonucleotide Probe

<400> 271  
gcggaagggc agaatgggac tccaag 26

<210> 272  
<211> 18  
<212> DNA  
<213> Artificial Sequence

p1618P2C2 sequence listing.txt

<220>  
<223> Synthetic Oligonucleotide Probe  
  
<400> 272  
cagccctgcc acatgtgc 18  
  
<210> 273  
<211> 18  
<212> DNA  
<213> Artificial Sequence  
  
<220>  
<223> Synthetic Oligonucleotide Probe  
  
<400> 273  
tactgggtgg tcagcaac 18  
  
<210> 274  
<211> 24  
<212> DNA  
<213> Artificial Sequence  
  
<220>  
<223> Synthetic Oligonucleotide Probe  
  
<400> 274  
ggcgaagagc agggtgagac cccg 24  
  
<210> 275  
<211> 45  
<212> DNA  
<213> Artificial Sequence  
  
<220>  
<223> Synthetic Oligonucleotide Probe  
  
<400> 275  
gccctcatcc tctctggcaa atgcagttac agcccggagc ccgac 45  
  
<210> 276  
<211> 21  
<212> DNA  
<213> Artificial Sequence  
  
<220>  
<223> Synthetic Oligonucleotide Probe  
  
<400> 276  
gggcagggat tccagggtc c 21  
  
<210> 277  
<211> 18  
<212> DNA  
<213> Artificial Sequence  
  
<220>  
<223> Synthetic Oligonucleotide Probe  
  
<400> 277  
ggctatgaca gcaggttc 18  
  
<210> 278

P1618P2C2 sequence listing.txt

<211> 18  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Synthetic Oligonucleotide Probe

<400> 278  
tgacaatgac cgaccagg 18

<210> 279  
<211> 24  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Synthetic Oligonucleotide Probe

<400> 279  
gcatcgatt gctggttagag caag 24

<210> 280  
<211> 45  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Synthetic Oligonucleotide Probe

<400> 280  
ttacagtgcc ccctggaaac ccacttggcc tgcataccgc ctccc 45

<210> 281  
<211> 34  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Synthetic Oligonucleotide Probe

<400> 281  
cgtctcgagc gctccataca gttcccttgc ccca 34

<210> 282  
<211> 61  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Synthetic Oligonucleotide Probe

<400> 282  
tggaggggga gcgggatgct tgtctgggag actccggggg cccctcatg 50  
tgccaggtgg a 61

<210> 283  
<211> 119  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Synthetic Oligonucleotide Probe

P1618P2C2 sequence listing.txt

<400> 283

ccctcagacc ctgcagaagc tgaaggttcc tatcatcgac tcggaagtct 50  
gcagccatct gtactggcgg ggagcaggac agggacccat cactgaggac 100  
atgctgtgtg ccggctact 119

<210> 284

<211> 1875

<212> DNA

<213> Homo Sapien

<400> 284

gacggctggc caccatgcac ggctcctgca gtttcctgat gcttctgctg 50  
ccgctactgc tactgctggt ggccaccaca ggccccgttg gagccctcac 100  
agatgaggag aaacgtttga tgggtggagct gcacaacctc tacggggccc 150  
aggtatcccc gacggcctca gacatgctgc acatgagatg ggacgaggag 200  
ctggccgcct tcgccaaggc ctacgcacgg cagtgcgtgt gggggccaca 250  
caaggagcgc gggcgccgcg gcgagaatct gttcgccatc acagacgagg 300  
gcatggacgt gccgctggcc atggaggagt ggcaccacga gcgtgagcac 350  
tacaacctca gcgccgccac ctgcagccca ggccagatgt gcggccacta 400  
cacgcaggtg gtatgggcca agacagagag gatcggtgt ggttcccact 450  
tctgtgagaa gctccagggg gttgaggaga ccaacatcga attactggtg 500  
tgcaactatg agcctccggg gaacgtgaag gggaaacggc cctaccagga 550  
ggggactccg tgctcccaat gtccctcttg ctaccactgc aagaactccc 600  
tctgtgaacc catcggaagc ccggaagatg ctcaggattt gccttacctg 650  
gtaactgagg ccccatcctt ccgggcgact gaagcatcag actctaggaa 700  
aatgggtact ctttcttccc tagcaacggg gattccggct ttcttggtaa 750  
cagaggtctc aggtctccctg gcaaccaagg ctctgcctgc tgtggaaacc 800  
caggccccaa cttccttagc aacgaaagac ccgccctcca tggcaacaga 850  
ggctccacct tgcgtaacaa ctgaggtccc ttccattttg gcagctcaca 900  
gcctgcccctc cttggatgag gagccagtta ctttcccaa atcgacccat 950  
gttcctatcc caaaatcagc agacaaagtg acagacaaaa caaaagtgcc 1000  
ctctaggagc ccagagaact ctctggaccc caagatgtcc ctgacagggg 1050  
caagggaact cctaccccat gcccaggagg aggtgaggc tgaggctgag 1100  
ttgcctcctt ccagtgaggt cttggcctca gtttttccag cccaggacaa 1150  
gccaggtgag ctgcaggcca cactggacca cacggggcac acctcctcca 1200  
agtccttgcc caatttcccc aatacctctg ccaccgctaa tgccacgggt 1250



P1618P2C2 sequence listing.txt

gggcgtgccc tggctctgca gtcgtccttg ccagggtgcag agggccctga 1300  
 caagcctagc gttgtgtcag ggctgaactc gggccctggg catgtgtggg 1350  
 gccctctcct gggactactg ctctgcctc ctctgggtgtt ggctggaatc 1400  
 ttctgaatgg gataccactc aaagggtgaa gaggtcagct gtcctcctgt 1450  
 catcttcccc accctgtccc cagcccctaa acaagatact tcttggttaa 1500  
 ggccctccgg aagggaaagg ctacggggca tgtgcctcat cacaccatcc 1550  
 atcctggagg cacaaggcct ggctggctgc gagctcagga ggccgcctga 1600  
 ggactgcaca ccgggcccac acctctcctg cccctccctc ctgagtcctg 1650  
 ggggtgggag gatttgaggg agctcactgc ctacctggcc tggggctgtc 1700  
 tgccacacaca gcatgtgcgc tctccctgag tgctgtgta gctggggatg 1750  
 gggattccta ggggcagatg aaggacaagc cccactggag tggggttctt 1800  
 tgagtggggg aggcagggac gagggaagga aagtaactcc tgactctcca 1850  
 ataaaaacct gtccaacctg tgaaa 1875

<210> 285  
 <211> 463  
 <212> PRT  
 <213> Homo Sapien

<400> 285  
 Met His Gly Ser Cys Ser Phe Leu Met Leu Leu Leu Pro Leu Leu  
 1 5 10 15  
 Leu Leu Leu Val Ala Thr Thr Gly Pro Val Gly Ala Leu Thr Asp  
 20 25 30  
 Glu Glu Lys Arg Leu Met Val Glu Leu His Asn Leu Tyr Arg Ala  
 35 40 45  
 Gln Val Ser Pro Thr Ala Ser Asp Met Leu His Met Arg Trp Asp  
 50 55 60  
 Glu Glu Leu Ala Ala Phe Ala Lys Ala Tyr Ala Arg Gln Cys Val  
 65 70 75  
 Trp Gly His Asn Lys Glu Arg Gly Arg Arg Gly Glu Asn Leu Phe  
 80 85 90  
 Ala Ile Thr Asp Glu Gly Met Asp Val Pro Leu Ala Met Glu Glu  
 95 100 105  
 Trp His His Glu Arg Glu His Tyr Asn Leu Ser Ala Ala Thr Cys  
 110 115 120  
 Ser Pro Gly Gln Met Cys Gly His Tyr Thr Gln Val Val Trp Ala  
 125 130 135  
 Lys Thr Glu Arg Ile Gly Cys Gly Ser His Phe Cys Glu Lys Leu  
 140 145 150

P1618P2C2 sequence listing.txt

Gln Gly Val Glu	Glu Thr Asn Ile Glu	Leu Leu Val Cys Asn Tyr
155		160 165
Glu Pro Pro Gly	Asn Val Lys Gly Lys	Arg Pro Tyr Gln Glu Gly
170		175 180
Thr Pro Cys Ser	Gln Cys Pro Ser Gly	Tyr His Cys Lys Asn Ser
185		190 195
Leu Cys Glu Pro	Ile Gly Ser Pro Glu	Asp Ala Gln Asp Leu Pro
200		205 210
Tyr Leu Val Thr	Glu Ala Pro Ser Phe	Arg Ala Thr Glu Ala Ser
215		220 225
Asp Ser Arg Lys	Met Gly Thr Pro Ser	Ser Leu Ala Thr Gly Ile
230		235 240
Pro Ala Phe Leu	Val Thr Glu Val Ser	Gly Ser Leu Ala Thr Lys
245		250 255
Ala Leu Pro Ala	Val Glu Thr Gln Ala	Pro Thr Ser Leu Ala Thr
260		265 270
Lys Asp Pro Pro	Ser Met Ala Thr Glu	Ala Pro Pro Cys Val Thr
275		280 285
Thr Glu Val Pro	Ser Ile Leu Ala Ala	His Ser Leu Pro Ser Leu
290		295 300
Asp Glu Glu Pro	Val Thr Phe Pro Lys	Ser Thr His Val Pro Ile
305		310 315
Pro Lys Ser Ala	Asp Lys Val Thr Asp	Lys Thr Lys Val Pro Ser
320		325 330
Arg Ser Pro Glu	Asn Ser Leu Asp Pro	Lys Met Ser Leu Thr Gly
335		340 345
Ala Arg Glu Leu	Leu Pro His Ala Gln	Glu Glu Ala Glu Ala Glu
350		355 360
Ala Glu Leu Pro	Pro Ser Ser Glu Val	Leu Ala Ser Val Phe Pro
365		370 375
Ala Gln Asp Lys	Pro Gly Glu Leu Gln	Ala Thr Leu Asp His Thr
380		385 390
Gly His Thr Ser	Ser Lys Ser Leu Pro	Asn Phe Pro Asn Thr Ser
395		400 405
Ala Thr Ala Asn	Ala Thr Gly Gly Arg	Ala Leu Ala Leu Gln Ser
410		415 420
Ser Leu Pro Gly	Ala Glu Gly Pro Asp	Lys Pro Ser Val Val Ser
425		430 435
Gly Leu Asn Ser	Gly Pro Gly His Val	Trp Gly Pro Leu Leu Gly
440		445 450
Leu Leu Leu Leu	Pro Pro Leu Val Leu	Ala Gly Ile Phe
455		460

P1618P2C2 sequence listing.txt

```

<210> 286
<211> 19
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic Oligonucleotide Probe

<400> 286
tcctgcagtt tcctgatgc 19

<210> 287
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic Oligonucleotide Probe

<400> 287
ctcatattgc acaccagtaa ttcg 24

<210> 288
<211> 45
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic Oligonucleotide Probe

<400> 288
atgaggagaa acgtttgatg gtggagctgc acaacctcta ccggg 45

<210> 289
<211> 3662
<212> DNA
<213> Homo Sapien

<400> 289
gtaactgaag tcaggctttt catttgggaa gccccctcaa cagaattcgg 50
tcattctcca agttatggtg gacgtacttc tgttgttctc cctctgcttg 100
ctttttcaca ttagcagacc ggacttaagt cacaacagat tatctttcat 150
caaggcaagt tccatgagcc accttcaaag ccttcgagaa gtgaaactga 200
acaacaatga attggagacc attccaaatc tgggaccagt ctcggcaaatt 250
attacacttc tctccttggc tggaaacagg attggtgaaa tactccctga 300
acatctgaaa gagtttcagt cccttgaaac tttggacctt agcagcaaca 350
atatttcaga gtcctaaact gcatttccag ccttacagct caaatatctg 400
tatctcaaca gcaaccgagt cacatcaatg gaacctgggt attttgacaa 450
tttggccaac acactccttg tgttaaagct gaacaggaac cgaatctcag 500
ctatcccacc caagatgttt aaactgcccc aactgcaaca tctcgaattg 550
aaccgaaaca agattaaaaa tgtagatgga ctgacattcc aaggccttgg 600

```

P1618P2C2 sequence listing.txt

tgctctgaag tctctgaaaa tgcaaagaaa tggagtaacg aaacttatgg 650  
 atggagcttt ttgggggctg agcaacatgg aaattttgca gctggaccat 700  
 aacaacctaa cagagattac caaaggctgg ctttacggct tgctgatgct 750  
 gcaggaactt catctcagcc aaaatgccat caacaggatc agccctgatg 800  
 cctgggagtt ctgccagaag ctcagtgagc tggacctaac tttcaatcac 850  
 ttatcaaggt tagatgattc aagcttcctt ggcctaagct tactaaatac 900  
 actgcacatt gggaacaaca gagtcagcta cattgctgat tgtgccttcc 950  
 gggggctttc cagtttaaag actttggatc tgaagaacaa tgaaatttcc 1000  
 tggactattg aagacatgaa tgggtgctttc tctgggcttg acaaactgag 1050  
 gcgactgata ctccaaggaa atcggatccg ttctattact aaaaaagcct 1100  
 tcactggttt ggatgcattg gagcatctag acctgagtga caacgcaatc 1150  
 atgtctttac aaggcaatgc attttcacia atgaagaaac tgcaacaatt 1200  
 gcatttaaat acatcaagcc ttttgtgcga ttgccagcta aaatggctcc 1250  
 cacagtgggt ggcggaaaac aactttcaga gctttgtaaa tgccagttgt 1300  
 gcccatcctc agctgctaaa aggaagaagc atttttgctg ttagcccaga 1350  
 tggctttgtg tgtgatgatt ttcccaaacc ccagatcacg gttcagccag 1400  
 aaacacagtc ggcaataaaa ggttccaatt tgagtttcat ctgctcagct 1450  
 gccagcagca gtgattcccc aatgactttt gcttgaaaaa aagacaatga 1500  
 actactgcat gatgctgaaa tggaaaatta tgcacacctc cgggccaag 1550  
 gtggcgaggt gatggagtat accaccatcc ttcggtgctg cgagggtggaa 1600  
 tttgccagtg aggggaaata tcagtgtgtc atctccaatc actttggttc 1650  
 atcctactct gtcaaagcca agcttacagt aaatatgctt ccctcattca 1700  
 ccaagacccc catggatctc accatccgag ctggggccat ggcacgcttg 1750  
 gagtgtgctg ctgtggggca cccagccccc cagatagcct ggcagaagga 1800  
 tgggggcaca gacttcccag ctgcacggga gagacgcatg catgtgatgc 1850  
 ccgaggatga cgtgttcttt atcgtggatg tgaagataga ggacattggg 1900  
 gtatacagct gcacagctca gaacagtgc ggaagtattt cagcaaatgc 1950  
 aactctgact gtcctagaaa caccatcatt tttgcggcca ctgttgacc 2000  
 gaactgtaac caaggagaaa acagccgtcc tacagtgcac tgctggagga 2050  
 agccctcccc ctaaactgaa ctggaccaa gatgatagcc cattggtggt 2100  
 aaccgagagg cacttttttg cagcaggcaa tcagcttctg attattgtgg 2150  
 actcagatgt cagtgatgct gggaaataca catgtgagat gtctaacc 2200

P1618P2C2 sequence listing.txt

cttggcactg agagaggaaa cgtgcgccctc agtgtgatcc ccactccaac 2250  
 ctgcgactcc cctcagatga cagccccatc gttagacgat gacggatggg 2300  
 ccactgtggg tgtcgtgatc atagccgtgg tttgctgtgt ggtgggcacg 2350  
 tcactcgtgt ggggtggtcat catataccac acaaggcgga ggaatgaaga 2400  
 ttgcagcatt accaacacag atgagaccaa cttgccagca gatattccta 2450  
 gttatttgtc atctcagga acgtagctg acaggcagga tgggtacgtg 2500  
 tcttcagaaa gtggaagcca ccaccagttt gtcacatctt caggtgctgg 2550  
 atttttctta ccacaacatg acagtagtgg gacctgccat attgacaata 2600  
 gcagtgaagc tgatgtggaa gctgccacag atctgttcct ttgtccgttt 2650  
 ttgggatcca caggccctat gtatttgaag ggaaatgtgt atggctcaga 2700  
 tccttttgaa acatatcata caggttgacg tcctgaccca agaacagttt 2750  
 taatggacca ctatgagccc agttacataa agaaaaagga gtgctacca 2800  
 tgttctcatc cttcagaaga atcctgcgaa cggagcttca gtaatatatc 2850  
 gtggccttca catgtgagga agctacttaa cactagtta ctcacaatg 2900  
 aaggacctgg aatgaaaaat ctgtgtctaa acaagtcctc tttagatttt 2950  
 agtgcaaatc cagagccagc gtcggttgcc tcgagtaatt ctttcatggg 3000  
 tacctttgga aaagctctca ggagacctca cctagatgcc tattcaagct 3050  
 ttggacagcc atcagattgt cagccaagag ctttttattt gaaagctcat 3100  
 tcttccccag acttggaactc tgggtcagag gaagatggga aagaaaggac 3150  
 agattttcag gaagaaaatc acatttgtac ctttaaacag acttttagaaa 3200  
 actacaggac tccaaatttt cagtcttatg acttggaacac atagactgaa 3250  
 tgagacaaaa ggaaaagctt aacatactac ctcaagtga cttttattta 3300  
 aaagagagag aatcttatgt tttttaaatg gagttatgaa ttttaaaagg 3350  
 ataaaaatgc tttatttata cagatgaacc aaaattacaa aaagtatatga 3400  
 aaatttttat actgggaatg atgctcatat aagaatacct ttttaaacta 3450  
 ttttttaact ttgttttatg caaaaaagta tcttacgtaa attaatgata 3500  
 taaatcatga ttattttatg tatttttata atgccagatt tctttttatg 3550  
 gaaaatgagt tactaaagca ttttaaataa tacctgcctt gtaccatttt 3600  
 ttaaatagaa gttacttcat tatattttgc acattatatt taataaaatg 3650  
 tgtcaatttg aa 3662

<210> 290  
 <211> 1059

P1618P2C2 sequence listing.txt

<212> PRT  
<213> Homo Sapien

<400> 290

```

Met Val Asp Val Leu Leu Leu Phe Ser Leu Cys Leu Leu Phe His
 1          5          10          15
Ile Ser Arg Pro Asp Leu Ser His Asn Arg Leu Ser Phe Ile Lys
          20          25          30
Ala Ser Ser Met Ser His Leu Gln Ser Leu Arg Glu Val Lys Leu
          35          40          45
Asn Asn Asn Glu Leu Glu Thr Ile Pro Asn Leu Gly Pro Val Ser
          50          55          60
Ala Asn Ile Thr Leu Leu Ser Leu Ala Gly Asn Arg Ile Val Glu
          65          70          75
Ile Leu Pro Glu His Leu Lys Glu Phe Gln Ser Leu Glu Thr Leu
          80          85          90
Asp Leu Ser Ser Asn Asn Ile Ser Glu Leu Gln Thr Ala Phe Pro
          95          100          105
Ala Leu Gln Leu Lys Tyr Leu Tyr Leu Asn Ser Asn Arg Val Thr
          110          115          120
Ser Met Glu Pro Gly Tyr Phe Asp Asn Leu Ala Asn Thr Leu Leu
          125          130          135
Val Leu Lys Leu Asn Arg Asn Arg Ile Ser Ala Ile Pro Pro Lys
          140          145          150
Met Phe Lys Leu Pro Gln Leu Gln His Leu Glu Leu Asn Arg Asn
          155          160          165
Lys Ile Lys Asn Val Asp Gly Leu Thr Phe Gln Gly Leu Gly Ala
          170          175          180
Leu Lys Ser Leu Lys Met Gln Arg Asn Gly Val Thr Lys Leu Met
          185          190          195
Asp Gly Ala Phe Trp Gly Leu Ser Asn Met Glu Ile Leu Gln Leu
          200          205          210
Asp His Asn Asn Leu Thr Glu Ile Thr Lys Gly Trp Leu Tyr Gly
          215          220          225
Leu Leu Met Leu Gln Glu Leu His Leu Ser Gln Asn Ala Ile Asn
          230          235          240
Arg Ile Ser Pro Asp Ala Trp Glu Phe Cys Gln Lys Leu Ser Glu
          245          250          255
Leu Asp Leu Thr Phe Asn His Leu Ser Arg Leu Asp Asp Ser Ser
          260          265          270
Phe Leu Gly Leu Ser Leu Leu Asn Thr Leu His Ile Gly Asn Asn
          275          280          285
Arg Val Ser Tyr Ile Ala Asp Cys Ala Phe Arg Gly Leu Ser Ser
          290          295          300

```

P1618P2C2 sequence listing.txt

Leu Lys Thr Leu	Asp 305	Leu Lys Asn Asn	Glu 310	Ile Ser Trp Thr	Ile 315
Glu Asp Met Asn	Gly 320	Ala Phe Ser Gly	Leu 325	Asp Lys Leu Arg	Arg 330
Leu Ile Leu Gln	Gly 335	Asn Arg Ile Arg	Ser 340	Ile Thr Lys Lys	Ala 345
Phe Thr Gly Leu	Asp 350	Ala Leu Glu His	Leu 355	Asp Leu Ser Asp	Asn 360
Ala Ile Met Ser	Leu 365	Gln Gly Asn Ala	Phe 370	Ser Gln Met Lys	Lys 375
Leu Gln Gln Leu	His 380	Leu Asn Thr Ser	Ser 385	Leu Leu Cys Asp	Cys 390
Gln Leu Lys Trp	Leu 395	Pro Gln Trp Val	Ala 400	Glu Asn Asn Phe	Gln 405
Ser Phe Val Asn	Ala 410	Ser Cys Ala His	Pro 415	Gln Leu Leu Lys	Gly 420
Arg Ser Ile Phe	Ala 425	Val Ser Pro Asp	Gly 430	Phe Val Cys Asp	Asp 435
Phe Pro Lys Pro	Gln 440	Ile Thr Val Gln	Pro 445	Glu Thr Gln Ser	Ala 450
Ile Lys Gly Ser	Asn 455	Leu Ser Phe Ile	Cys 460	Ser Ala Ala Ser	Ser 465
Ser Asp Ser Pro	Met 470	Thr Phe Ala Trp	Lys 475	Lys Asp Asn Glu	Leu 480
Leu His Asp Ala	Glu 485	Met Glu Asn Tyr	Ala 490	His Leu Arg Ala	Gln 495
Gly Gly Glu Val	Met 500	Glu Tyr Thr Thr	Ile 505	Leu Arg Leu Arg	Glu 510
Val Glu Phe Ala	Ser 515	Glu Gly Lys Tyr	Gln 520	Cys Val Ile Ser	Asn 525
His Phe Gly Ser	Ser 530	Tyr Ser Val Lys	Ala 535	Lys Leu Thr Val	Asn 540
Met Leu Pro Ser	Phe 545	Thr Lys Thr Pro	Met 550	Asp Leu Thr Ile	Arg 555
Ala Gly Ala Met	Ala 560	Arg Leu Glu Cys	Ala 565	Ala Val Gly His	Pro 570
Ala Pro Gln Ile	Ala 575	Trp Gln Lys Asp	Gly 580	Gly Thr Asp Phe	Pro 585
Ala Ala Arg Glu	Arg 590	Arg Met His Val	Met 595	Pro Glu Asp Asp	Val 600
Phe Phe Ile Val	Asp 605	Val Lys Ile Glu	Asp 610	Ile Gly Val Tyr	Ser 615

P1618P2C2 sequence listing.txt

Cys Thr Ala Gln	Asn Ser Ala Gly Ser	Ile Ser Ala Asn Ala	Thr
	620	625	630
Leu Thr Val Leu	Glu Thr Pro Ser Phe	Leu Arg Pro Leu Leu	Asp
	635	640	645
Arg Thr Val Thr	Lys Gly Glu Thr Ala	Val Leu Gln Cys Ile	Ala
	650	655	660
Gly Gly Ser Pro	Pro Pro Lys Leu Asn	Trp Thr Lys Asp Asp	Ser
	665	670	675
Pro Leu Val Val	Thr Glu Arg His Phe	Phe Ala Ala Gly Asn	Gln
	680	685	690
Leu Leu Ile Ile	Val Asp Ser Asp Val	Ser Asp Ala Gly Lys	Tyr
	695	700	705
Thr Cys Glu Met	Ser Asn Thr Leu Gly	Thr Glu Arg Gly Asn	Val
	710	715	720
Arg Leu Ser Val	Ile Pro Thr Pro Thr	Cys Asp Ser Pro Gln	Met
	725	730	735
Thr Ala Pro Ser	Leu Asp Asp Asp Gly	Trp Ala Thr Val Gly	Val
	740	745	750
Val Ile Ile Ala	Val Val Cys Cys Val	Val Gly Thr Ser Leu	Val
	755	760	765
Trp Val Val Ile	Ile Tyr His Thr Arg	Arg Arg Asn Glu Asp	Cys
	770	775	780
Ser Ile Thr Asn	Thr Asp Glu Thr Asn	Leu Pro Ala Asp Ile	Pro
	785	790	795
Ser Tyr Leu Ser	Ser Gln Gly Thr Leu	Ala Asp Arg Gln Asp	Gly
	800	805	810
Tyr Val Ser Ser	Glu Ser Gly Ser His	His Gln Phe Val Thr	Ser
	815	820	825
Ser Gly Ala Gly	Phe Phe Leu Pro Gln	His Asp Ser Ser Gly	Thr
	830	835	840
Cys His Ile Asp	Asn Ser Ser Glu Ala	Asp Val Glu Ala Ala	Thr
	845	850	855
Asp Leu Phe Leu	Cys Pro Phe Leu Gly	Ser Thr Gly Pro Met	Tyr
	860	865	870
Leu Lys Gly Asn	Val Tyr Gly Ser Asp	Pro Phe Glu Thr Tyr	His
	875	880	885
Thr Gly Cys Ser	Pro Asp Pro Arg Thr	Val Leu Met Asp His	Tyr
	890	895	900
Glu Pro Ser Tyr	Ile Lys Lys Lys Glu	Cys Tyr Pro Cys Ser	His
	905	910	915
Pro Ser Glu Glu	Ser Cys Glu Arg Ser	Phe Ser Asn Ile Ser	Trp
	920	925	930



P1618P2C2 sequence listing.txt

Pro	Ser	His	Val	Arg	Lys	Leu	Leu	Asn	Thr	Ser	Tyr	Ser	His	Asn
				935					940					945
Glu	Gly	Pro	Gly	Met	Lys	Asn	Leu	Cys	Leu	Asn	Lys	Ser	Ser	Leu
				950					955					960
Asp	Phe	Ser	Ala	Asn	Pro	Glu	Pro	Ala	Ser	Val	Ala	Ser	Ser	Asn
				965					970					975
Ser	Phe	Met	Gly	Thr	Phe	Gly	Lys	Ala	Leu	Arg	Arg	Pro	His	Leu
				980					985					990
Asp	Ala	Tyr	Ser	Ser	Phe	Gly	Gln	Pro	Ser	Asp	Cys	Gln	Pro	Arg
				995					1000					1005
Ala	Phe	Tyr	Leu	Lys	Ala	His	Ser	Ser	Pro	Asp	Leu	Asp	Ser	Gly
				1010					1015					1020
Ser	Glu	Glu	Asp	Gly	Lys	Glu	Arg	Thr	Asp	Phe	Gln	Glu	Glu	Asn
				1025					1030					1035
His	Ile	Cys	Thr	Phe	Lys	Gln	Thr	Leu	Glu	Asn	Tyr	Arg	Thr	Pro
				1040					1045					1050
Asn	Phe	Gln	Ser	Tyr	Asp	Leu	Asp	Thr						
				1055										

<210> 291  
 <211> 2906  
 <212> DNA  
 <213> Homo Sapien

<400> 291  
 ggggagagga attgaccatg taaaaggaga cttttttttt tgggtggtggt 50  
 ggctgttggg tgccttgcaa aaatgaagga tgcaggacgc agctttctcc 100  
 tggaaccgaa cgcaatggat aaactgattg tgcaagagag aaggaagaac 150  
 gaagcttttt cttgtgagcc ctggatctta acacaaatgt gtatatgtgc 200  
 acacagggag cattcaagaa tgaaataaac cagagttaga cccgcggggg 250  
 ttggtgtgtt ctgacataaa taaataatct taaagcagct gttcccctcc 300  
 ccacccccaa aaaaaaggat gattggaaat gaagaaccga ggattcaca 350  
 agaaaaaagt atgttcattt ttctctataa aggagaaagt gagccaagga 400  
 gatatttttg gaatgaaaag tttggggcct ttttagtaaa gtaaagaact 450  
 ggtgtggtgg tgttttcctt tctttttgaa tttcccacaa gaggagagga 500  
 aattaataat acatctgcaa agaaatttca gagaagaaaa gttgaccgcg 550  
 gcagattgag gcattgattg ggggagagaa accagcagag cacagttgga 600  
 tttgtgccta tgttgactaa aattgacgga taattgcagt tggatttttc 650  
 ttcatcaacc tccttttttt taaattttta ttccttttgg tatcaagatc 700  
 atgcgttttc tcttgttcct aaccacctgg atttccatct ggatgttgct 750

P1618P2C2 sequence listing.txt

gtgatcagtc tgaaatacaa ctgtttgaat tccagaagga ccaacaccag 800  
ataaattatg aatggtgaac aagatgacct tacatccaca gcagataatg 850  
ataggtccta gggttaacag ggccctatgt gacccctgc ttgtggtgct 900  
gctggctctt caacttcttg tgggtggctgg tctggtgcgg gctcagacct 950  
gcccttctgt gtgctcctgc agcaaccagt tcagcaaggt gatttgtgtt 1000  
cggaaaaacc tgcgtgaggt tccgatggc atctccacca acacacggct 1050  
gctgaacctc catgagaacc aaatccagat catcaaagt aacagcttca 1100  
agcattgag gcacttgga atcctacagt tgagtaggaa ccatatcaga 1150  
accattgaaa ttggggcttt caatggtctg gcgaacctca acactctgga 1200  
actctttgac aatcgtctta ctaccatccc gaatggagct tttgtatact 1250  
tgtctaaact gaaggagctc tgggtgcgaa acaaccccat tgaaagcatc 1300  
ccttcttatg cttttaacag aattccttct ttgcgccgac tagacttagg 1350  
ggaattgaaa agactttcat acatctcaga aggtgccttt gaaggctctgt 1400  
ccaacttgag gtatttgaac cttgccatgt gcaaccttcg ggaaatccct 1450  
aacctcacac cgctcataaa actagatgag ctggatcttt ctgggaatca 1500  
tttatctgcc atcaggcctg gctctttcca gggtttgatg caccttcaaa 1550  
aactgtggat gatacagtc cagattcaag tgattgaacg gaatgccttt 1600  
gacaaccttc agtcactagt ggagatcaac ctggcacaca ataactaac 1650  
attactgcct catgacctct tcaactccctt gcatcatcta gagcggatac 1700  
atttacatca caacccttg aactgtaact gtgacatact gtggctcagc 1750  
tgggtggataa aagacatggc cccctcgaac acagcttggt gtgcccgggtg 1800  
taacactcct ccaatctaa aggggaggta cattggagag ctcgaccaga 1850  
attacttcac atgctatgct ccggtgattg tggagcccc tgcagacctc 1900  
aatgtcactg aaggcatggc agctgagctg aaatgtcggg cctccacatc 1950  
cctgacatct gtatcttga ttactccaaa tggaacagtc atgacacatg 2000  
gggcgtacaa agtgccgata gctgtgctca gtgatggtac gttaaatttc 2050  
acaaatgtaa ctgtgcaaga tacaggcatg tacacatgta tggtagtaaa 2100  
ttccgttggg aatactactg cttcagccac cctgaatgtt actgcagcaa 2150  
ccactactcc tttctcttac tttcaaccg tcacagtaga gactatggaa 2200  
ccgtctcagg atgaggcacg gaccacagat aacaatgtgg gtcccactcc 2250  
agtggctgac tgggagacca ccaatgtgac cacctctctc acaccacaga 2300

P1618P2C2 sequence listing.txt

gcacaaggtc gacagagaaa accttcacca tcccagtgac tgatataaac 2350  
 agtgggatcc caggaattga tgaggatcatg aagactacca aaatcatcat 2400  
 tgggtgtttt gtggccatca cactcatggc tgcagtgatg ctggtcattt 2450  
 tctacaagat gaggaagcag caccatcggc aaaaccatca cgccccaaca 2500  
 aggactgttg aaattattaa tgtggatgat gagattacgg gagacacacc 2550  
 catggaaagc cacctgccca tgcctgctat cgagcatgag cacctaaatc 2600  
 actataactc atacaaatct cccttcaacc acacaacaac agttaacaca 2650  
 ataaattcaa tacacagttc agtgcataaa ccgttattga tccgaatgaa 2700  
 ctctaaagac aatgtacaag agactcaaat ctaaaacatt tacagagtta 2750  
 caaaaaacaa acaatcaaaa aaaaagacag tttattaaaa atgacacaaa 2800  
 tgactgggct aaatctactg tttcaaaaaa gtgtctttac aaaaaaacia 2850  
 aaaagaaaag aaatttattt attaaaaatt ctattgtgat ctaaagcaga 2900  
 caaaaa 2906

<210> 292  
 <211> 640  
 <212> PRT  
 <213> Homo Sapien

<400> 292

Met	Leu	Asn	Lys	Met	Thr	Leu	His	Pro	Gln	Gln	Ile	Met	Ile	Gly
1				5					10					15
Pro	Arg	Phe	Asn	Arg	Ala	Leu	Phe	Asp	Pro	Leu	Leu	Val	Val	Leu
			20						25					30
Leu	Ala	Leu	Gln	Leu	Leu	Val	Val	Ala	Gly	Leu	Val	Arg	Ala	Gln
			35						40					45
Thr	Cys	Pro	Ser	Val	Cys	Ser	Cys	Ser	Asn	Gln	Phe	Ser	Lys	Val
			50						55					60
Ile	Cys	Val	Arg	Lys	Asn	Leu	Arg	Glu	Val	Pro	Asp	Gly	Ile	Ser
			65						70					75
Thr	Asn	Thr	Arg	Leu	Leu	Asn	Leu	His	Glu	Asn	Gln	Ile	Gln	Ile
			80						85					90
Ile	Lys	Val	Asn	Ser	Phe	Lys	His	Leu	Arg	His	Leu	Glu	Ile	Leu
			95						100					105
Gln	Leu	Ser	Arg	Asn	His	Ile	Arg	Thr	Ile	Glu	Ile	Gly	Ala	Phe
			110						115					120
Asn	Gly	Leu	Ala	Asn	Leu	Asn	Thr	Leu	Glu	Leu	Phe	Asp	Asn	Arg
			125						130					135
Leu	Thr	Thr	Ile	Pro	Asn	Gly	Ala	Phe	Val	Tyr	Leu	Ser	Lys	Leu
			140						145					150
Lys	Glu	Leu	Trp	Leu	Arg	Asn	Asn	Pro	Ile	Glu	Ser	Ile	Pro	Ser

P1618P2C2 sequence listing.txt

155		160	165
Tyr Ala Phe Asn Arg	Ile Pro Ser Leu	Arg Arg Leu Asp Leu	Gly
170		175	180
Glu Leu Lys Arg Leu	Ser Tyr Ile Ser	Glu Gly Ala Phe Glu	Gly
185		190	195
Leu Ser Asn Leu Arg	Tyr Leu Asn Leu	Ala Met Cys Asn Leu	Arg
200		205	210
Glu Ile Pro Asn Leu	Thr Pro Leu Ile	Lys Leu Asp Glu Leu	Asp
215		220	225
Leu Ser Gly Asn His	Leu Ser Ala Ile	Arg Pro Gly Ser Phe	Gln
230		235	240
Gly Leu Met His Leu	Gln Lys Leu Trp	Met Ile Gln Ser Gln	Ile
245		250	255
Gln Val Ile Glu Arg	Asn Ala Phe Asp	Asn Leu Gln Ser Leu	Val
260		265	270
Glu Ile Asn Leu Ala	His Asn Asn Leu	Thr Leu Leu Pro His	Asp
275		280	285
Leu Phe Thr Pro Leu	His His Leu Glu	Arg Ile His Leu His	His
290		295	300
Asn Pro Trp Asn Cys	Asn Cys Asp Ile	Leu Trp Leu Ser Trp	Trp
305		310	315
Ile Lys Asp Met Ala	Pro Ser Asn Thr	Ala Cys Cys Ala Arg	Cys
320		325	330
Asn Thr Pro Pro Asn	Leu Lys Gly Arg	Tyr Ile Gly Glu Leu	Asp
335		340	345
Gln Asn Tyr Phe Thr	Cys Tyr Ala Pro	Val Ile Val Glu Pro	Pro
350		355	360
Ala Asp Leu Asn Val	Thr Glu Gly Met	Ala Ala Glu Leu Lys	Cys
365		370	375
Arg Ala Ser Thr Ser	Leu Thr Ser Val	Ser Trp Ile Thr Pro	Asn
380		385	390
Gly Thr Val Met Thr	His Gly Ala Tyr	Lys Val Arg Ile Ala	Val
395		400	405
Leu Ser Asp Gly Thr	Leu Asn Phe Thr	Asn Val Thr Val Gln	Asp
410		415	420
Thr Gly Met Tyr Thr	Cys Met Val Ser	Asn Ser Val Gly Asn	Thr
425		430	435
Thr Ala Ser Ala Thr	Leu Asn Val Thr	Ala Ala Thr Thr Thr	Pro
440		445	450
Phe Ser Tyr Phe Ser	Thr Val Thr Val	Glu Thr Met Glu Pro	Ser
455		460	465
Gln Asp Glu Ala Arg	Thr Thr Asp Asn	Asn Val Gly Pro Thr	Pro

P1618P2C2 sequence listing.txt

470 475 480

Val Val Asp Trp Glu Thr Thr Asn Val Thr Thr Ser Leu Thr Pro  
485 490 495

Gln Ser Thr Arg Ser Thr Glu Lys Thr Phe Thr Ile Pro Val Thr  
500 505 510

Asp Ile Asn Ser Gly Ile Pro Gly Ile Asp Glu Val Met Lys Thr  
515 520 525

Thr Lys Ile Ile Ile Gly Cys Phe Val Ala Ile Thr Leu Met Ala  
530 535 540

Ala Val Met Leu Val Ile Phe Tyr Lys Met Arg Lys Gln His His  
545 550 555

Arg Gln Asn His His Ala Pro Thr Arg Thr Val Glu Ile Ile Asn  
560 565 570

Val Asp Asp Glu Ile Thr Gly Asp Thr Pro Met Glu Ser His Leu  
575 580 585

Pro Met Pro Ala Ile Glu His Glu His Leu Asn His Tyr Asn Ser  
590 595 600

Tyr Lys Ser Pro Phe Asn His Thr Thr Thr Val Asn Thr Ile Asn  
605 610 615

Ser Ile His Ser Ser Val His Glu Pro Leu Leu Ile Arg Met Asn  
620 625 630

Ser Lys Asp Asn Val Gln Glu Thr Gln Ile  
635 640

<210> 293

<211> 4053

<212> DNA

<213> Homo Sapien

<400> 293

agccgacgct gctcaagctg caactctgtt gcagttggca gttcttttcg 50  
gtttccctcc tgctgttttg gggcatgaaa gggcttcgcc gccgggagta 100  
aaagaaggaa ttgaccgggc agcgcgaggg aggagcgcgc acgcgaccgc 150  
gagggcgggc gtgcaccctc ggctggaagt ttgtgccggg ccccgagcgc 200  
gcgccggctg ggagcttcgg gtagagacct aggccgctgg accgcgatga 250  
gcgcgccgag cctccgtgcg cgcgccgcgg ggttggggct gctgctgtgc 300  
gcggtgctgg ggcgcgctgg ccggtccgac agcggcggtc gcggggaact 350  
cgggcagccc tctggggtag ccgccgagcg cccatgcccc actacctgcc 400  
gctgcctcgg ggacctgctg gactgcagtc gtaagcggct agcgcgtctt 450  
cccgagccac tcccgtcctg ggtcgtcgg ctggacttaa gtcacaacag 500  
attatctttc atcaaggcaa gttccatgag ccaccttcaa agccttcgag 550

P1618P2C2 sequence listing.txt

aagtgaaact gaacaacaat gaattggaga ccattccaaa tctgggacca 600  
gtctcggcaa atattacact tctctccttg gctggaaaca ggattgttga 650  
aatactccct gaacatctga aagagtttca gtcccttgaa actttggacc 700  
ttagcagcaa caatatttca gagctccaaa ctgcatttcc agccctacag 750  
ctcaaataatc tgtatctcaa cagcaaccga gtcacatcaa tggaacctgg 800  
gtattttgac aatttgacca acacactcct tgtgttaaag ctgaacagga 850  
accgaatctc agctatccca cccaagatgt ttaaactgcc ccaactgcaa 900  
catctcgaat tgaaccgaaa caagattaaa aatgtagatg gactgacatt 950  
ccaaggcctt ggtgctctga agtctctgaa aatgcaaaga aatggagtaa 1000  
cgaaacttat ggatggagct ttttgggggc tgagcaacat ggaaattttg 1050  
cagctggacc ataacaacct aacagagatt accaaaggct ggctttacgg 1100  
cttgctgatg ctgcaggaac ttcattctcag ccaaaatgcc atcaacagga 1150  
tcagccctga tgcttgggag ttctgccaga agctcagtga gctggacct 1200  
actttcaatc acttatcaag gttagatgat tcaagcttcc ttggcctaag 1250  
cttactaaat aactgcaca ttgggaacaa cagagtcagc tacattgctg 1300  
attgtgcctt ccgggggctt tccagtttaa agactttgga tctgaagaac 1350  
aatgaaatth cctggactat tgaagacatg aatggtgctt tctctgggct 1400  
tgacaaaactg aggcgactga tactccaagg aaatcggatc cgttctatta 1450  
ctaaaaaagc cttcactggt ttggatgcat tggagcatct agacctgagt 1500  
gacaacgcaa tcatgtcttt acaaggcaat gcattttcac aaatgaagaa 1550  
actgcaacaa ttgcatttaa atacatcaag ctttttgtgc gattgccagc 1600  
taaaatggct cccacagtgg gtggcggaac acaactttca gagctttgta 1650  
aatgccagtt gtgcccattc tcagctgcta aaaggaagaa gcatttttgc 1700  
tgtttagccca gatggctttg tgtgtgatga ttttcccaa cccagatca 1750  
cggttcagcc agaaacacag tcggcaataa aaggttcaa tttgagtttc 1800  
atctgctcag ctgccagcag cagtgattcc ccaatgactt ttgcttggaa 1850  
aaaagacaat gaactactgc atgatgctga aatggaaaat tatgcacacc 1900  
tccgggcccc aggtggcgag gtgatggagt ataccacat ccttcggctg 1950  
cgcgaggttg aatttgccag tgaggggaaa tatcagtgtg tcatctcaa 2000  
tcactttggt tcattctact ctgtcaaagc caagcttaca gtaaatatgc 2050  
ttccctcatt caccaagacc cccatggatc tcaccatccg agctggggcc 2100  
atggcacgct tggagtgtgc tgctgtgggg caccagccc cccagatagc 2150

P1618P2C2 sequence listing.txt

ctggcagaag gatgggggca cagacttccc agctgcacgg gagagacgca 2200  
 tgcattgat gcccaggat gacgtgttct ttatcgtgga tgtgaagata 2250  
 gaggacattg gggatatacag ctgcacagct cagaacagtg caggaagtat 2300  
 ttcagcaaatt gcaactctga ctgtcctaga aacaccatca tttttgcggc 2350  
 cactgttggga ccgaactgta accaagggag aaacagccgt cctacagtgc 2400  
 attgctggag gaagccctcc ccctaaactg aactggacca aagatgatag 2450  
 cccattggtg gtaaccgaga ggcacttttt tgcagcaggc aatcagcttc 2500  
 tgattattgt ggactcagat gtcagtgatg ctgggaaata cacatgtgag 2550  
 atgtctaaca cccttggcac tgagagagga aacgtgcgcc tcagtgtgat 2600  
 cccactcca acctgcgact cccctcagat gacagcccca tcgttagacg 2650  
 atgacggatg ggccactgtg ggtgtcgtga tcatagccgt ggtttgctgt 2700  
 gtggtgggca cgctactcgt gtgggtggtc atcatatacc acacaaggcg 2750  
 gaggaatgaa gattgcagca ttaccaacac agatgagacc aacttgccag 2800  
 cagatattcc tagttatttg tcatctcagg gaacgttagc tgacaggcag 2850  
 gatgggtacg tgtcttcaga aagtggaagc caccaccagt ttgtcacatc 2900  
 ttcaggtgct ggatttttct taccacaaca tgacagtagt gggacctgcc 2950  
 atattgacaa tagcagtga gctgatgtgg aagctgccac agatctgttc 3000  
 ctttgtccgt ttttgggatc cacaggccct atgtatttga agggaaatgt 3050  
 gtatggctca gatccttttg aaacatatca tacaggttgc agtcctgacc 3100  
 caagaacagt tttaatggac cactatgagc ccagttacat aaagaaaaag 3150  
 gagtgctacc catgtttctc tccttcagaa gaatcctgcg aacggagctt 3200  
 cagtaatata tcgtggcctt cacatgtgag gaagctactt aacactagtt 3250  
 actctcacia tgaaggacct ggaatgaaaa atctgtgtct aaacaagtcc 3300  
 tcttttagatt ttagtgcaaa tccagagcca gcgtcggttg cctcgagtaa 3350  
 ttctttcatg ggtacctttg gaaaagctct caggagacct cacctagatg 3400  
 cctattcaag ctttggacag ccatcagatt gtcagccaag agccttttat 3450  
 ttgaaagctc attcttcccc agacttggac tctgggtcag aggaagatgg 3500  
 gaaagaaagg acagattttc aggaagaaaa tcacatttgt acctttaaac 3550  
 agactttaga aaactacagg actccaaatt ttcagtctta tgacttggac 3600  
 acatagactg aatgagacca aaggaaaagc ttaacatact acctcaagtg 3650  
 aacttttatt taaaagagag agaattttat gttttttaaa tggagttatg 3700

P1618P2C2 sequence listing.txt

aatttttaaaa ggataaaaaat gctttatttta tacagatgaa ccaaaattac 3750  
 aaaaagttat gaaaattttt atactgggaa tgatgctcat ataagaatac 3800  
 ctttttaaac tatttttttaa ctttgtttta tgcaaaaaag tatcttacgt 3850  
 aaattaatga tataaatcat gattatttta tgtattttta taatgccaga 3900  
 tttcttttta tggaaaatga gttactaaag cattttaaat aatacctgcc 3950  
 ttgtaccatt ttttaaatag aagttacttc attatatattt gcacattata 4000  
 ttttaataaaa tgtgtcaatt tgaaaaaaa aaaaaaaaaa aaaaaaaaaa 4050  
 aaa 4053

<210> 294  
 <211> 1119  
 <212> PRT  
 <213> Homo Sapien

<400> 294  
 Met Ser Ala Pro Ser Leu Arg Ala Arg Ala Ala Gly Leu Gly Leu  
 1 5 10 15  
 Leu Leu Cys Ala Val Leu Gly Arg Ala Gly Arg Ser Asp Ser Gly  
 20 25 30  
 Gly Arg Gly Glu Leu Gly Gln Pro Ser Gly Val Ala Ala Glu Arg  
 35 40 45  
 Pro Cys Pro Thr Thr Cys Arg Cys Leu Gly Asp Leu Leu Asp Cys  
 50 55 60  
 Ser Arg Lys Arg Leu Ala Arg Leu Pro Glu Pro Leu Pro Ser Trp  
 65 70 75  
 Val Ala Arg Leu Asp Leu Ser His Asn Arg Leu Ser Phe Ile Lys  
 80 85 90  
 Ala Ser Ser Met Ser His Leu Gln Ser Leu Arg Glu Val Lys Leu  
 95 100 105  
 Asn Asn Asn Glu Leu Glu Thr Ile Pro Asn Leu Gly Pro Val Ser  
 110 115 120  
 Ala Asn Ile Thr Leu Leu Ser Leu Ala Gly Asn Arg Ile Val Glu  
 125 130 135  
 Ile Leu Pro Glu His Leu Lys Glu Phe Gln Ser Leu Glu Thr Leu  
 140 145 150  
 Asp Leu Ser Ser Asn Asn Ile Ser Glu Leu Gln Thr Ala Phe Pro  
 155 160 165  
 Ala Leu Gln Leu Lys Tyr Leu Tyr Leu Asn Ser Asn Arg Val Thr  
 170 175 180  
 Ser Met Glu Pro Gly Tyr Phe Asp Asn Leu Ala Asn Thr Leu Leu  
 185 190 195  
 Val Leu Lys Leu Asn Arg Asn Arg Ile Ser Ala Ile Pro Pro Lys  
 200 205 210



P1618P2C2 sequence listing.txt

Met Phe Lys Leu	Pro Gln Leu Gln His	Leu Glu Leu Asn Arg	Asn
	215	220	225
Lys Ile Lys Asn Val	Asp Gly Leu Thr	Phe Gln Gly Leu Gly	Ala
	230	235	240
Leu Lys Ser Leu	Lys Met Gln Arg Asn	Gly Val Thr Lys Leu	Met
	245	250	255
Asp Gly Ala Phe	Trp Gly Leu Ser Asn	Met Glu Ile Leu Gln	Leu
	260	265	270
Asp His Asn Asn	Leu Thr Glu Ile Thr	Lys Gly Trp Leu Tyr	Gly
	275	280	285
Leu Leu Met Leu	Gln Glu Leu His Leu	Ser Gln Asn Ala Ile	Asn
	290	295	300
Arg Ile Ser Pro	Asp Ala Trp Glu Phe	Cys Gln Lys Leu Ser	Glu
	305	310	315
Leu Asp Leu Thr	Phe Asn His Leu Ser	Arg Leu Asp Asp Ser	Ser
	320	325	330
Phe Leu Gly Leu	Ser Leu Leu Asn Thr	Leu His Ile Gly Asn	Asn
	335	340	345
Arg Val Ser Tyr	Ile Ala Asp Cys Ala	Phe Arg Gly Leu Ser	Ser
	350	355	360
Leu Lys Thr Leu	Asp Leu Lys Asn Asn	Glu Ile Ser Trp Thr	Ile
	365	370	375
Glu Asp Met Asn	Gly Ala Phe Ser Gly	Leu Asp Lys Leu Arg	Arg
	380	385	390
Leu Ile Leu Gln	Gly Asn Arg Ile Arg	Ser Ile Thr Lys Lys	Ala
	395	400	405
Phe Thr Gly Leu	Asp Ala Leu Glu His	Leu Asp Leu Ser Asp	Asn
	410	415	420
Ala Ile Met Ser	Leu Gln Gly Asn Ala	Phe Ser Gln Met Lys	Lys
	425	430	435
Leu Gln Gln Leu	His Leu Asn Thr Ser	Ser Leu Leu Cys Asp	Cys
	440	445	450
Gln Leu Lys Trp	Leu Pro Gln Trp Val	Ala Glu Asn Asn Phe	Gln
	455	460	465
Ser Phe Val Asn	Ala Ser Cys Ala His	Pro Gln Leu Leu Lys	Gly
	470	475	480
Arg Ser Ile Phe	Ala Val Ser Pro Asp	Gly Phe Val Cys Asp	Asp
	485	490	495
Phe Pro Lys Pro	Gln Ile Thr Val Gln	Pro Glu Thr Gln Ser	Ala
	500	505	510
Ile Lys Gly Ser	Asn Leu Ser Phe Ile	Cys Ser Ala Ala Ser	Ser
	515	520	525

P1618P2C2 sequence listing.txt

Ser Asp Ser Pro	Met Thr Phe Ala Trp	Lys Lys Asp Asn Glu Leu	530	535	540
Leu His Asp Ala	Glu Met Glu Asn Tyr	Ala His Leu Arg Ala Gln	545	550	555
Gly Gly Glu Val	Met Glu Tyr Thr Thr	Ile Leu Arg Leu Arg Glu	560	565	570
Val Glu Phe Ala	Ser Glu Gly Lys Tyr	Gln Cys Val Ile Ser Asn	575	580	585
His Phe Gly Ser	Ser Tyr Ser Val Lys	Ala Lys Leu Thr Val Asn	590	595	600
Met Leu Pro Ser	Phe Thr Lys Thr Pro	Met Asp Leu Thr Ile Arg	605	610	615
Ala Gly Ala Met	Ala Arg Leu Glu Cys	Ala Ala Val Gly His Pro	620	625	630
Ala Pro Gln Ile	Ala Trp Gln Lys Asp	Gly Gly Thr Asp Phe Pro	635	640	645
Ala Ala Arg Glu	Arg Arg Met His Val	Met Pro Glu Asp Asp Val	650	655	660
Phe Phe Ile Val	Asp Val Lys Ile Glu	Asp Ile Gly Val Tyr Ser	665	670	675
Cys Thr Ala Gln	Asn Ser Ala Gly Ser	Ile Ser Ala Asn Ala Thr	680	685	690
Leu Thr Val Leu	Glu Thr Pro Ser Phe	Leu Arg Pro Leu Leu Asp	695	700	705
Arg Thr Val Thr	Lys Gly Glu Thr Ala	Val Leu Gln Cys Ile Ala	710	715	720
Gly Gly Ser Pro	Pro Pro Lys Leu Asn	Trp Thr Lys Asp Asp Ser	725	730	735
Pro Leu Val Val	Thr Glu Arg His Phe	Phe Ala Ala Gly Asn Gln	740	745	750
Leu Leu Ile Ile	Val Asp Ser Asp Val	Ser Asp Ala Gly Lys Tyr	755	760	765
Thr Cys Glu Met	Ser Asn Thr Leu Gly	Thr Glu Arg Gly Asn Val	770	775	780
Arg Leu Ser Val	Ile Pro Thr Pro Thr	Cys Asp Ser Pro Gln Met	785	790	795
Thr Ala Pro Ser	Leu Asp Asp Asp Gly	Trp Ala Thr Val Gly Val	800	805	810
Val Ile Ile Ala	Val Val Cys Cys Val	Val Gly Thr Ser Leu Val	815	820	825
Trp Val Val Ile	Ile Tyr His Thr Arg	Arg Arg Asn Glu Asp Cys	830	835	840

P1618P2C2 sequence listing.txt

Ser Ile Thr Asn	Thr Asp Glu Thr Asn	Leu Pro Ala Asp Ile	Pro
	845	850	855
Ser Tyr Leu Ser	Ser Gln Gly Thr Leu	Ala Asp Arg Gln Asp	Gly
	860	865	870
Tyr Val Ser Ser	Glu Ser Gly Ser His	His Gln Phe Val Thr	Ser
	875	880	885
Ser Gly Ala Gly	Phe Phe Leu Pro Gln	His Asp Ser Ser Gly	Thr
	890	895	900
Cys His Ile Asp	Asn Ser Ser Glu Ala	Asp Val Glu Ala Ala	Thr
	905	910	915
Asp Leu Phe Leu	Cys Pro Phe Leu Gly	Ser Thr Gly Pro Met	Tyr
	920	925	930
Leu Lys Gly Asn	Val Tyr Gly Ser Asp	Pro Phe Glu Thr Tyr	His
	935	940	945
Thr Gly Cys Ser	Pro Asp Pro Arg Thr	Val Leu Met Asp His	Tyr
	950	955	960
Glu Pro Ser Tyr	Ile Lys Lys Lys Glu	Cys Tyr Pro Cys Ser	His
	965	970	975
Pro Ser Glu Glu	Ser Cys Glu Arg Ser	Phe Ser Asn Ile Ser	Trp
	980	985	990
Pro Ser His Val	Arg Lys Leu Leu Asn	Thr Ser Tyr Ser His	Asn
	995	1000	1005
Glu Gly Pro Gly	Met Lys Asn Leu Cys	Leu Asn Lys Ser Ser	Leu
	1010	1015	1020
Asp Phe Ser Ala	Asn Pro Glu Pro Ala	Ser Val Ala Ser Ser	Asn
	1025	1030	1035
Ser Phe Met Gly	Thr Phe Gly Lys Ala	Leu Arg Arg Pro His	Leu
	1040	1045	1050
Asp Ala Tyr Ser	Ser Phe Gly Gln Pro	Ser Asp Cys Gln Pro	Arg
	1055	1060	1065
Ala Phe Tyr Leu	Lys Ala His Ser Ser	Pro Asp Leu Asp Ser	Gly
	1070	1075	1080
Ser Glu Glu Asp	Gly Lys Glu Arg Thr	Asp Phe Gln Glu Glu	Asn
	1085	1090	1095
His Ile Cys Thr	Phe Lys Gln Thr Leu	Glu Asn Tyr Arg Thr	Pro
	1100	1105	1110
Asn Phe Gln Ser	Tyr Asp Leu Asp Thr		
	1115		

<210> 295

<211> 18

<212> DNA

<213> Artificial Sequence

P1618P2C2 sequence listing.txt

<220>  
<223> Synthetic Oligonucleotide Probe

<400> 295  
ggaaccgaat ctcagcta 18

<210> 296  
<211> 19  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Synthetic Oligonucleotide Probe

<400> 296  
cctaaactga actggacca 19

<210> 297  
<211> 19  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Synthetic Oligonucleotide Probe

<400> 297  
ggctggagac actgaacct 19

<210> 298  
<211> 24  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Synthetic Oligonucleotide Probe

<400> 298  
acagctgcac agctcagaac agtg 24

<210> 299  
<211> 22  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Synthetic Oligonucleotide Probe

<400> 299  
cattcccagt ataaaaattt tc 22

<210> 300  
<211> 18  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Synthetic Oligonucleotide Probe

<400> 300  
gggtcttggt gaatgagg 18

<210> 301  
<211> 24

P1618P2C2 sequence listing.txt

<212> DNA  
<213> Artificial Sequence  
  
<220>  
<223> Synthetic Oligonucleotide Probe  
  
<400> 301  
gtgcctctcg gttaccacca atgg 24  
  
<210> 302  
<211> 50  
<212> DNA  
<213> Artificial Sequence  
  
<220>  
<223> Synthetic Oligonucleotide Probe  
  
<400> 302  
gcggccactg ttggaccgaa ctgtaaccaa gggagaaaca gccgtcctac 50  
  
<210> 303  
<211> 28  
<212> DNA  
<213> Artificial Sequence  
  
<220>  
<223> Synthetic Oligonucleotide Probe  
  
<400> 303  
gcctttgaca accttcagtc actagtgg 28  
  
<210> 304  
<211> 24  
<212> DNA  
<213> Artificial Sequence  
  
<220>  
<223> Synthetic Oligonucleotide Probe  
  
<400> 304  
cccatgtgt ccatgactgt tccc 24  
  
<210> 305  
<211> 45  
<212> DNA  
<213> Artificial Sequence  
  
<220>  
<223> Synthetic Oligonucleotide Probe  
  
<400> 305  
tactgcctca tgacctcttc actcccttgc atcatcttag agcgg 45  
  
<210> 306  
<211> 24  
<212> DNA  
<213> Artificial Sequence  
  
<220>  
<223> Synthetic Oligonucleotide Probe  
  
<400> 306  
actccaagga aatcgatcc gttc 24

P1618P2C2 sequence listing.txt

<210> 307  
 <211> 24  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Synthetic oligonucleotide probe

<400> 307  
 ttagcagctg aggatgggca caac 24

<210> 308  
 <211> 24  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Synthetic Oligonucleotide Probe

<400> 308  
 actccaagga aatcggatcc gttc 24

<210> 309  
 <211> 50  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Synthetic Oligonucleotide Probe

<400> 309  
 gccttcactg gtttgatgc attggagcat ctagacctga gtgacaacgc 50

<210> 310  
 <211> 3296  
 <212> DNA  
 <213> Homo Sapien

<400> 310  
 caaaacttgc gtcgcggaga gcgcccagct tgacttgaat ggaaggagcc 50  
 cgagcccgcg gagcgcagct gagactgggg gagcgcgttc ggcctgtggg 100  
 gcgcccgtcg gcgcccggggc gcagcaggga aggggaagct gtggtctgcc 150  
 ctgctccacg aggcgccact ggtgtgaacc gggagagccc ctgggtggtc 200  
 ccgtcccccta tccctccttt atatagaaac cttccacact gggaaggcag 250  
 cggcgaggca ggagggtca tggtagcaa ggaggccggc tgatctgcag 300  
 gcgcacagca ttccgagttt acagattttt acagatacca aatggaaggc 350  
 gaggaggcag aacagcctgc ctggttccat cagccctggc gcccaggcgc 400  
 atctgactcg gcaccccctg caggcaccat ggcccagagc cgggtgctgc 450  
 tgctcctgct gctgctgccg ccacagctgc acctgggacc tgtgcttgcc 500  
 gtgagggccc caggatttgg ccgaagtggc ggccacagcc tgagccccga 550  
 agagaacgaa tttgcggagg aggagccggt gctggtactg agccctgagg 600

P1618P2C2 sequence listing.txt

agcccggggc tggcccagcc gcggtcagct gcccccgaga ctgtgcctgt 650  
 tcccaggagg gcgtcgtgga ctgtggcggt attgacctgc gtgagttccc 700  
 gggggacctg cctgagcaca ccaaccacct atctctgcag aacaaccagc 750  
 tggaaaagat ctaccctgag gagctctccc ggctgcaccg gctggagaca 800  
 ctgaacctgc aaaacaaccg cctgacttcc cgagggctcc cagagaaggc 850  
 gtttgagcat ctgaccaacc tcaattacct gtacttggcc aataacaagc 900  
 tgaccttggc accccgcttc ctgccaaacg ccctgatcag tgtggacttt 950  
 gctgccaact atctcaccaa gatctatggg ctacactttg gccagaagcc 1000  
 aaacttgagg tctgtgtacc tgcacaacaa caagctggca gacgccgggc 1050  
 tgccggacaa catgttcaac ggctccagca acgtcgaggc cctcatcctg 1100  
 tccagcaact tctgcgcca cgtgcccaag cacctgccgc ctgccctgta 1150  
 caagctgcac ctcaagaaca acaagctgga gaagatcccc ccgggggcct 1200  
 tcagcgagct gagcagcctg cgcgagctat acctgcagaa caactacctg 1250  
 actgacgagg gcctggacaa cgagaccttc tggaagctct ccagcctgga 1300  
 gtacctggat ctgtccagca acaacctgtc tcgggtccca gctgggctgc 1350  
 cgcgcagcct ggtgtgtctg cacttggaga agaacgccat ccggagcgtg 1400  
 gacgcgaatg tgctgacccc catccgcagc ctggagtacc tgctgctgca 1450  
 cagcaaccag ctgcgggagc agggcatcca cccactggcc ttccagggcc 1500  
 tcaagcggtt gcacacggtg cacctgtaca acaacgcgct ggagcgcgtg 1550  
 cccagtggcc tgccctgccg cgtgcgcacc ctcatgatcc tgcacaacca 1600  
 gatcacaggc attggccgcg aagactttgc caccacctac ttcctggagg 1650  
 agctcaacct cagctacaac cgcatacca gccacaggt gcaccgcgac 1700  
 gccttccgca agctgcgcct gctgcgctcg ctggacctgt cgggcaaccg 1750  
 gctgcacacg ctgccacctg ggctgcctcg aaatgtccat gtgctgaagg 1800  
 tcaagcgcaa tgagctggct gccttggcac gaggggcgct ggcgggcatg 1850  
 gctcagctgc gtgagctgta cctcaccagc aaccgactgc gcagccgagc 1900  
 cctgggcccc cgtgcctggg tggacctcgc ccatctgcag ctgctggaca 1950  
 tcgccgggaa tcagctcaca gagatccccg aggggctccc cgagtcactt 2000  
 gagtacctgt acctgcagaa caacaagatt agtgcggtgc ccgccaatgc 2050  
 cttcgactcc acgccaacc tcaaggggat ctttctcagg tttaacaagc 2100  
 tggctgtggg ctccgtggtg gacagtgcct tccggaggct gaagcacctg 2150

P1618P2C2 sequence listing.txt

cagggtcttgg acattgaagg caacttagag ttggtgaca tttccaagga 2200  
 ccgtggccgc ttggggaagg aaaaggagga ggaggaagag gaggaggagg 2250  
 aggaagagga aacaagatag tgacaagggtg atgcagatgt gacctaggat 2300  
 gatggaccgc cggactcttt tctgcagcac acgcctgtgt gctgtgagcc 2350  
 cccactctg ccgtgctcac acagacacac ccagctgcac acatgaggca 2400  
 tcccacatga cacgggctga cacagtctca tatccccacc cttcccacg 2450  
 gcgtgtccca cggccagaca catgcacaca catcacacc taaacaccc 2500  
 agctcagcca cacacaacta cctccaaac caccacagtc tctgtcacac 2550  
 cccactacc gctgccacgc cctctgaatc atgcagggaa gggctctgcc 2600  
 ctgccctggc acacacaggc acccattccc tccccctgct gacatgtgta 2650  
 tgcgtatgca tacacaccac acacacacac atgcacaagt catgtgcgaa 2700  
 cagccctcca aagcctatgc cacagacagc tcttgccca gccagaatca 2750  
 gccatagcag ctgccgtct gccctgtcca tctgtccgtc cgttccctgg 2800  
 agaagacaca agggatatca tgctctgtgg ccagggtgcct gccaccctct 2850  
 ggaactcaca aaagctggct tttattcctt tcccatccta tggggacagg 2900  
 agccttcagg actgctggcc tggcctggcc caccctgctc ctccagggtc 2950  
 tgggcagtca ctctgctaag agtccctccc tgccacgccc tggcaggaca 3000  
 caggcacttt tccaatgggc aagcccagtg gaggcaggat gggagagccc 3050  
 cctgggtgct gctggggcct tggggcagga gtgaagcaga ggtgatgggg 3100  
 ctgggctgag ccagggagga aggaccacgc tgcacctagg agacaccttt 3150  
 gttcttcagg cctgtggggg aagttccggg tgcctttatt tttattcctt 3200  
 ttctaaggaa aaaaatgata aaaatctcaa agctgatttt tcttggtata 3250  
 gaaaaactaa tataaaagca ttatccctat ccctgcaaaa aaaaaa 3296

<210> 311

<211> 22

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic Oligonucleotide Probe

<400> 311

gcattggccg cgagactttg cc 22

<210> 312

<211> 22

<212> DNA

<213> Artificial Sequence

<220>



<223> Synthetic Oligonucleotide Probe

<400> 312

gcggccacgg tccttgga aa tg 22

<210> 313

<211> 45

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic Oligonucleotide Probe

<400> 313

tggaggagct caacctcagc tacaaccgca tcaccagccc acagg 45

<210> 314

<211> 3003

<212> DNA

<213> Homo Sapien

<400> 314

gggagggggc tccgggccc gcgcagcaga cctgctccgg ccgcgcgcct 50  
cgccgctgtc ctccgggagc ggcagcagta gcccgggcgg cgagggctgg 100  
gggttcctcg agactctcag aggggcgcct cccatcggcg cccaccaccc 150  
caacctgttc ctgcgcgcc actgcgctgc gcccaggac ccgctgcca 200  
acatggattt tctcctggcg ctggtgctgg tatcctcgct ctacctgcag 250  
gcggccgcgg agttcgacgg gaggtggccc aggcaaatag tgtcatcgat 300  
tggcctatgt cgttatggtg ggaggattga ctgctgctgg ggctgggctc 350  
gccagtcttg gggacagtgt cagcctgtgt gcccaaccag atgcaaacaat 400  
ggtgaatgta tcggggccaa caagtgaag tgtcatcctg gttatgctgg 450  
aaaaacctgt aatcaagatc taaatgagtg tggcctgaag ccccgccct 500  
gtaagcacag gtgcatgaac acttacggca gctacaagtg ctactgtctc 550  
aacggatata tgctcatgcc ggatggttcc tgctcaagtg ccctgacctg 600  
ctccatggca aactgtcagt atggctgtga tgttgttaaa ggacaaatac 650  
ggtgccagtg cccatcccct ggcctgcacc tggctcctga tgggaggacc 700  
tgtgtagatg ttgatgaatg tgctacagga agagcctcct gccctagatt 750  
taggcaatgt gtcaacactt ttgggagcta catctgcaag tgtcataaag 800  
gcttcgatct catgtatatt ggaggcaa atcaatgtca tgacatagac 850  
gaatgctcac ttggctagta tcagtgcagc agctttgctc gatgttataa 900  
cgtacgtggg tectacaagt gcaaagttaa agaaggatac cagggtgatg 950  
gactgacttg tgtgtatatc ccaaagtta tgattgaacc ttcagggtcca 1000  
attcatgtac caaagggaaa tgggtaccatt ttaaagggtg acacaggaaa 1050

P1618P2C2 sequence listing.txt

taataattgg attcctgatg ttggaagtac ttggtggcct ccgaagacac 1100  
 catatatccc tcctatcatt accaacaggc ctacttctaa gccaacaaca 1150  
 agacctacac caaagccaac accaattcct actccaccac caccaccacc 1200  
 cctgccaaca gagctcagaa cacctctacc acctacaacc ccagaaaggc 1250  
 caaccaccgg actgacaact atagcaccag ctgccagtac acctccagga 1300  
 gggattacag ttgacaacag ggtacagaca gaccctcaga aaccagagg 1350  
 agatgtgttc agtgttctgg tacacagttg taattttgac catggacttt 1400  
 gtggatggat cagggagaaa gacaatgact tgcactggga accaatcagg 1450  
 gaccagcag gtggacaata tctgacagtg tcggcagcca aagccccagg 1500  
 gggaaaagct gcacgcttgg tgctacctct cggccgcctc atgcattcag 1550  
 gggacctgtg cctgtcattc aggcacaagg tgacggggct gcactctggc 1600  
 aactccagg tgtttgtgag aaaacacggt gccacaggag cagccctgtg 1650  
 ggaagaaat ggtggccatg gctggaggca aacacagatc accttgcgag 1700  
 gggctgacat caagagcgaa tcacaaagat gattaaagg ttggaaaaaa 1750  
 agatctatga tggaaaatta aaggaactgg gattattgag cctggagaag 1800  
 agaagactga ggggcaaacc attgatggtt ttcaagtata tgaagggttg 1850  
 gcacagagag ggtggcgacc agctgttctc catatgcact aagaatagaa 1900  
 caagaggaaa ctggcttaga ctagagtata agggagcatt tcttggcagg 1950  
 ggccattgtt agaatacttc ataaaaaaag aagtgtgaaa atctcagtat 2000  
 ctctctctct ttctaaaaaa ttagataaaa atttgtctat ttaagatggt 2050  
 taaagatgtt cttacccaag gaaaagtaac aaattataga atttcccaa 2100  
 agatgttttg atcctactag tagtatgcag tgaaaatctt tagaactaaa 2150  
 taatttggac aaggcttaat ttaggcattt cctcttgac ctctaatgg 2200  
 agagggattg aaaggggaag agcccaccaa atgctgagct cactgaaata 2250  
 tctctccctt atggcaatcc tagcagtatt aaagaaaaaa ggaaactatt 2300  
 tattccaaat gagagtatga tggacagata ttttagtatc tcagtaatgt 2350  
 cctagtgtgg cggtggtttt caatgtttct tcatggtaaa ggtataagcc 2400  
 tttcatttgt tcaatggatg atgtttcaga tttttttttt ttttaagagat 2450  
 ctttcaagga acacagttca gagagatttt catcgggtgc attctctctg 2500  
 cttcgtgtgt gacaagttat cttggctgct gagaaagagt gccctgcccc 2550  
 acaccggcag acctttcctt cacctcatca gtatgattca gtttctctta 2600

P1618P2C2 sequence listing.txt

tcaattggac tctcccaggt tccacagaac agtaatat tttgaacaat 2650  
 aggtacaata gaaggtcttc tgtcatttaa cctggtaaag gcagggctgg 2700  
 agggggaaaa taaatcatta agcctttgag taacggcaga atatatggct 2750  
 gtagatccat ttttaatggg tcatttcctt tatggtcata taactgcaca 2800  
 gctgaagatg aaaggggaaa ataaatgaaa attttacttt tcgatgccaa 2850  
 tgatacattg cactaaactg atggaagaag ttatccaaag tactgtataa 2900  
 catcttggtt attatttaat gttttctaaa ataaaaaatg ttagtggttt 2950  
 tccaaatggc ctaataaaaa caattatttg taaataaaaa cactgttagt 3000  
 at 3003

<210> 315  
 <211> 509  
 <212> PRT  
 <213> Homo Sapien

<400> 315  
 Met Asp Phe Leu Leu Ala Leu Val Leu Val Ser Ser Leu Tyr Leu  
 1 5 10 15  
 Gln Ala Ala Ala Glu Phe Asp Gly Arg Trp Pro Arg Gln Ile Val  
 20 25 30  
 Ser Ser Ile Gly Leu Cys Arg Tyr Gly Gly Arg Ile Asp Cys Cys  
 35 40 45  
 Trp Gly Trp Ala Arg Gln Ser Trp Gly Gln Cys Gln Pro Val Cys  
 50 55 60  
 Gln Pro Arg Cys Lys His Gly Glu Cys Ile Gly Pro Asn Lys Cys  
 65 70 75  
 Lys Cys His Pro Gly Tyr Ala Gly Lys Thr Cys Asn Gln Asp Leu  
 80 85 90  
 Asn Glu Cys Gly Leu Lys Pro Arg Pro Cys Lys His Arg Cys Met  
 95 100 105  
 Asn Thr Tyr Gly Ser Tyr Lys Cys Tyr Cys Leu Asn Gly Tyr Met  
 110 115 120  
 Leu Met Pro Asp Gly Ser Cys Ser Ser Ala Leu Thr Cys Ser Met  
 125 130 135  
 Ala Asn Cys Gln Tyr Gly Cys Asp Val Val Lys Gly Gln Ile Arg  
 140 145 150  
 Cys Gln Cys Pro Ser Pro Gly Leu His Leu Ala Pro Asp Gly Arg  
 155 160 165  
 Thr Cys Val Asp Val Asp Glu Cys Ala Thr Gly Arg Ala Ser Cys  
 170 175 180  
 Pro Arg Phe Arg Gln Cys Val Asn Thr Phe Gly Ser Tyr Ile Cys  
 185 190 195

P1618P2C2 sequence listing.txt

Lys Cys His Lys Gly	Phe Asp Leu Met Tyr Ile Gly Gly Lys Tyr	200	205	210
Gln Cys His Asp Ile	Asp Glu Cys Ser Leu Gly Gln Tyr Gln Cys	215	220	225
Ser Ser Phe Ala Arg	Cys Tyr Asn Val Arg Gly Ser Tyr Lys Cys	230	235	240
Lys Cys Lys Glu Gly	Tyr Gln Gly Asp Gly Leu Thr Cys Val Tyr	245	250	255
Ile Pro Lys Val Met	Ile Glu Pro Ser Gly Pro Ile His Val Pro	260	265	270
Lys Gly Asn Gly Thr	Ile Leu Lys Gly Asp Thr Gly Asn Asn Asn	275	280	285
Trp Ile Pro Asp Val	Gly Ser Thr Trp Trp Pro Pro Lys Thr Pro	290	295	300
Tyr Ile Pro Pro Ile	Ile Thr Asn Arg Pro Thr Ser Lys Pro Thr	305	310	315
Thr Arg Pro Thr Pro	Lys Pro Thr Pro Ile Pro Thr Pro Pro Pro	320	325	330
Pro Pro Pro Leu Pro	Thr Glu Leu Arg Thr Pro Leu Pro Pro Thr	335	340	345
Thr Pro Glu Arg Pro	Thr Thr Gly Leu Thr Thr Ile Ala Pro Ala	350	355	360
Ala Ser Thr Pro Pro	Gly Gly Ile Thr Val Asp Asn Arg Val Gln	365	370	375
Thr Asp Pro Gln Lys	Pro Arg Gly Asp Val Phe Ser Val Leu Val	380	385	390
His Ser Cys Asn Phe	Asp His Gly Leu Cys Gly Trp Ile Arg Glu	395	400	405
Lys Asp Asn Asp Leu	His Trp Glu Pro Ile Arg Asp Pro Ala Gly	410	415	420
Gly Gln Tyr Leu Thr	Val Ser Ala Ala Lys Ala Pro Gly Gly Lys	425	430	435
Ala Ala Arg Leu Val	Leu Pro Leu Gly Arg Leu Met His Ser Gly	440	445	450
Asp Leu Cys Leu Ser	Phe Arg His Lys Val Thr Gly Leu His Ser	455	460	465
Gly Thr Leu Gln Val	Phe Val Arg Lys His Gly Ala His Gly Ala	470	475	480
Ala Leu Trp Gly Arg	Asn Gly Gly His Gly Trp Arg Gln Thr Gln	485	490	495
Ile Thr Leu Arg Gly	Ala Asp Ile Lys Ser Glu Ser Gln Arg	500	505	

P1618P2C2 sequence listing.txt

```

<210> 316
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic Oligonucleotide Probe

<400> 316
gatggttcct gctcaagtgc cctg 24

<210> 317
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic Oligonucleotide Probe

<400> 317
ttgcacttgt aggaccacg tacg 24

<210> 318
<211> 50
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic Oligonucleotide Probe

<400> 318
ctgatgggag gacctgtgta gatgttgatg aatgtgctac aggaagagcc 50

<210> 319
<211> 2110
<212> DNA
<213> Homo Sapien

<400> 319
cttctttgaa aaggattatc acctgatcag gttctctctg catttgcccc 50
ttagattgt gaaatgtggc tcaaggtctt cacaactttc ctttcctttg 100
caacaggtgc ttgctcgggg ctgaaggtga cagtgccatc acacactgtc 150
catggcgtca gaggtcaggg cctctaccta cccgtccact atggcttcca 200
cactccagea teagacatcc agatcatatg gctatttgag agaccccaca 250
caatgcccac atacttactg ggctctgtga ataagtctgt ggttcctgac 300
ttggaatacc aacacaagtt caccatgatg ccaccaatg catctctgct 350
tatcaacca ctgcagttcc ctgatgaagg caattacatc gtgaaggtca 400
acattcaggg aaatggaact ctatctgcca gtcagaagat acaagtcacg 450
gttgatgatc ctgtcacaaa gccagtggtg cagattcatc ctccctctgg 500
ggctgtggag tatgtgggga acatgaccct gacatgccat gtggaagggg 550
gcactcggct agcttaccaa tggctaataaa atgggagacc tgtccacacc 600

```

P1618P2C2 sequence listing.txt

```

agctccacct actccttttc tccccaaaac aatacccttc atattgctcc 650
agtaaccaag gaagacattg ggaattacag ctgcctggtg aggaaccctg 700
tcagtgaat ggaaagtgat atcattatgc ccatcatata ttatggacct 750
tatggacttc aagtgaattc tgataaaggg ctaaaagtag gggaagtgtt 800
tactgttgac cttggagagg ccatcctatt tgattgttct gctgattctc 850
atcccccaa cacctactcc tggattagga ggactgacaa tactacatat 900
atcattaagc atgggcctcg cttagaagtt gcatctgaga aagtagccca 950
gaagacaatg gactatgtgt gctgtgctta caacaacata accggcaggc 1000
aagatgaaac tcatttcaca gttatcatca cttccgtagg actggagaag 1050
cttgcacaga aaggaaaatc attgtcacct ttagcaagta taactggaat 1100
atcactatth ttgattatat ccatgtgtct tctcttccta tggaaaaaat 1150
atcaacccta caaagttata aaacagaaac tagaaggcag gccagaaaca 1200
gaatacagga aagctcaaac attttcaggc catgaagatg ctctggatga 1250
cttcggaata tatgaatttg ttgcttttcc agatgtttct ggtgtttcca 1300
ggattccaag caggtctgtt ccagcctctg attgtgtatc ggggcaagat 1350
ttgcacagta cagtgtatga agttattcag cacatccctg cccagcagca 1400
agaccatcca gagtgaactt tcatgggcta aacagtacat tcgagtgaat 1450
ttctgaagaa acattttaag gaaaaacagt ggaaaagtat attaactctg 1500
aatcagtga gaaaccagga ccaacacctc ttactcatta ttcctttaca 1550
tgcagaatag aggcatttat gcaaattgaa ctgcagggtt ttcagcatat 1600
acacaatgtc ttgtgcaaca gaaaaacatg ttgggggaaat attcctcagt 1650
ggagagtcgt tctcatgctg acggggagaa cgaaagtgac aggggtttcc 1700
tcataagttt tgtatgaaat atctctacaa acctcaatta gttctactct 1750
acactttcac tatcatcaac actgagacta tcctgtctca cctacaaatg 1800
tggaacttt acattgttcg atttttcagc agactttgtt ttattaaatt 1850
tttattagt ttaagaatgc taaatttatg tttcaatttt atttccaaat 1900
ttctatcttg ttatttgtac aacaaagtaa taaggatggt tgtcacaaaa 1950
acaaaactat gccttctctt ttttttcaat caccagtagt atttttgaga 2000
agacttgtga acacttaagg aaatgactat taaagtctta tttttatttt 2050
tttcaaggaa agatggattc aaataaatta ttctgttttt gcttttaaaa 2100
aaaaaaaaa 2110

```

<210> 320

P1618P2C2 sequence listing.txt

<211> 450

<212> PRT

<213> Homo Sapien

<400> 320

Met Trp Leu Lys Val Phe Thr Thr Phe Leu Ser Phe Ala Thr Gly  
1 5 10 15

Ala Cys Ser Gly Leu Lys Val Thr Val Pro Ser His Thr Val His  
20 25 30

Gly Val Arg Gly Gln Ala Leu Tyr Leu Pro Val His Tyr Gly Phe  
35 40 45

His Thr Pro Ala Ser Asp Ile Gln Ile Ile Trp Leu Phe Glu Arg  
50 55 60

Pro His Thr Met Pro Lys Tyr Leu Leu Gly Ser Val Asn Lys Ser  
65 70 75

Val Val Pro Asp Leu Glu Tyr Gln His Lys Phe Thr Met Met Pro  
80 85 90

Pro Asn Ala Ser Leu Leu Ile Asn Pro Leu Gln Phe Pro Asp Glu  
95 100 105

Gly Asn Tyr Ile Val Lys Val Asn Ile Gln Gly Asn Gly Thr Leu  
110 115 120

Ser Ala Ser Gln Lys Ile Gln Val Thr Val Asp Asp Pro Val Thr  
125 130 135

Lys Pro Val Val Gln Ile His Pro Pro Ser Gly Ala Val Glu Tyr  
140 145 150

Val Gly Asn Met Thr Leu Thr Cys His Val Glu Gly Gly Thr Arg  
155 160 165

Leu Ala Tyr Gln Trp Leu Lys Asn Gly Arg Pro Val His Thr Ser  
170 175 180

Ser Thr Tyr Ser Phe Ser Pro Gln Asn Asn Thr Leu His Ile Ala  
185 190 195

Pro Val Thr Lys Glu Asp Ile Gly Asn Tyr Ser Cys Leu Val Arg  
200 205 210

Asn Pro Val Ser Glu Met Glu Ser Asp Ile Ile Met Pro Ile Ile  
215 220 225

Tyr Tyr Gly Pro Tyr Gly Leu Gln Val Asn Ser Asp Lys Gly Leu  
230 235 240

Lys Val Gly Glu Val Phe Thr Val Asp Leu Gly Glu Ala Ile Leu  
245 250 255

Phe Asp Cys Ser Ala Asp Ser His Pro Pro Asn Thr Tyr Ser Trp  
260 265 270

Ile Arg Arg Thr Asp Asn Thr Thr Tyr Ile Ile Lys His Gly Pro  
275 280 285

Arg Leu Glu Val Ala Ser Glu Lys Val Ala Gln Lys Thr Met Asp  
Page 207

P1618P2C2 sequence listing.txt

290	295	300
Tyr Val Cys Cys Ala Tyr Asn Asn Ile Thr Gly Arg Gln Asp Glu		
305	310	315
Thr His Phe Thr Val Ile Ile Thr Ser Val Gly Leu Glu Lys Leu		
320	325	330
Ala Gln Lys Gly Lys Ser Leu Ser Pro Leu Ala Ser Ile Thr Gly		
335	340	345
Ile Ser Leu Phe Leu Ile Ile Ser Met Cys Leu Leu Phe Leu Trp		
350	355	360
Lys Lys Tyr Gln Pro Tyr Lys Val Ile Lys Gln Lys Leu Glu Gly		
365	370	375
Arg Pro Glu Thr Glu Tyr Arg Lys Ala Gln Thr Phe Ser Gly His		
380	385	390
Glu Asp Ala Leu Asp Asp Phe Gly Ile Tyr Glu Phe Val Ala Phe		
395	400	405
Pro Asp Val Ser Gly Val Ser Arg Ile Pro Ser Arg Ser Val Pro		
410	415	420
Ala Ser Asp Cys Val Ser Gly Gln Asp Leu His Ser Thr Val Tyr		
425	430	435
Glu Val Ile Gln His Ile Pro Ala Gln Gln Gln Asp His Pro Glu		
440	445	450

<210> 321  
 <211> 25  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Synthetic Oligonucleotide Probe

<400> 321  
 gatcctgtca caaagccagt ggtgc 25

<210> 322  
 <211> 24  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Synthetic Oligonucleotide Probe

<400> 322  
 cactgacagg gttcctcacc cagg 24

<210> 323  
 <211> 45  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Synthetic Oligonucleotide Probe

<400> 323



P1618P2C2 sequence listing.txt

ctccctctgg gctgtggagt atgtggggaa catgaccctg acatg 45

<210> 324

<211> 2397

<212> DNA

<213> Homo Sapien

<400> 324

gcaagcggcg aaatggcgcc ctccgggagt cttgcagttc ccctggcagt 50  
 cctggtgctg ttgctttggg gtgctccctg gacgcacggg cggcggagca 100  
 acgttcgcgt catcacggac gagaactgga gagaactgct ggaaggagac 150  
 tggatgatag aattttatgc cccgtggtgc cctgcttgtc aaaatcttca 200  
 accggaatgg gaaagttttg ctgaatgggg agaagatctt gaggttaata 250  
 ttgcgaaagt agatgtcaca gagcagccag gactgagtgg acggtttatc 300  
 ataactgctc ttcctactat ttatcattgt aaagatggtg aatttaggcg 350  
 ctatcagggt ccaaggacta agaaggactt cataaacttt ataagtata 400  
 aagagtggaa gagtattgag cccgtttcat catggtttgg tccaggttct 450  
 gttctgatga gtagtatgtc agcactcttt cagctatcta tgtggatcag 500  
 gacgtgccat aactacttta ttgaagacct tggattgcca gtgtggggat 550  
 catatactgt ttttgcttta gcaactctgt tttccggact gttattagga 600  
 ctctgtatga tatttggtggc agattgcctt tgtccttcaa aaaggcgcag 650  
 accacagcca taccataacc cttcaaaaaa attattatca gaatctgcac 700  
 aacctttgaa aaaagtggag gaggaacaag aggcggatga agaagatgtt 750  
 tcagaagaag aagctgaaag taaagaagga acaaacaag actttccaca 800  
 gaatgccata agacaacgct ctctgggtcc atcattggcc acagataaat 850  
 cctagttaaa ttttatagtt atcttaatat tatgattttg ataaaaacag 900  
 aagattgatc attttgtttg gtttgaagtg aactgtgact ttttgaata 950  
 ttgcagggtt cagtctagat tgtcattaaa ttgaagagtc tacattcaga 1000  
 acataaaagc actaggtata caagtttgaa atatgattta agcacagtat 1050  
 gatggtttta atagttctct aatttttgaa aaatcgtgcc aagcaataag 1100  
 atttatgtat atttgtttta taataacctt tttcaagtct gagttttgaa 1150  
 aatttacatt tccaagtat tgcattattg aggtatttaa gaagattatt 1200  
 ttagagaaaa atatttctca tttgatataa ttttctctg tttcactgtg 1250  
 tgaaaaaaag aagatatttc ccataaatgg gaagtttgcc cattgtctca 1300  
 agaaatgtgt atttcagtga caatttcgtg gtctttttag aggtatattc 1350  
 caaaatttcc ttgtattttt aggttatgca actaataaaa actaccttac 1400

P1618P2C2 sequence listing.txt

attaattaat tacagttttc tacacatggg aatacaggat atgctactga 1450  
 ttttaggaagt ttttaagttc atgggtattct cttgattcca acaaagtttg 1500  
 attttctctt gtatttttct tacttactat gggttacatt ttttattttt 1550  
 caaattggat gataatttct tggaaacatt ttttatgttt tagtaaacag 1600  
 tatttttttg ttgtttcaaa ctgaagttaa ctgagagatc catcaaattg 1650  
 aacaatctgt tgtaatttaa aattttggcc acttttttca gattttacat 1700  
 cattcttgct gaacttcaac ttgaaattgt ttttttttc tttttggatg 1750  
 tgaaggtgaa cattcctgat ttttgtctga tgtgaaaaag ccttggtatt 1800  
 ttacattttg aaaattcaaa gaagcttaat ataaaagttt gcattctact 1850  
 caggaaaaag catcttcttg tatatgtctt aaatgtattt ttgtcctcat 1900  
 atacagaaag ttcttaattg attttacagt ctgtaatgct tgatgtttta 1950  
 aaataataac atttttatat tttttaaaag acaaacttca tattatcctg 2000  
 tgttctttcc tgactggtaa tattgtgtgg gatttcacag gtaaaagtca 2050  
 gtaggatgga acattttagt gtatttttac tccttaaaga gctagaatac 2100  
 atagttttca ccttaaaga agggggaaaa tcataaatac aatgaatcaa 2150  
 ctgaccatta cgtagtagac aatttctgta atgtcccctt ctttctaggc 2200  
 tctgttgctg tgtgaatcca ttagatttac agtatcgtaa tatacaagtt 2250  
 ttcttttaaag ccctctcctt tagaatttaa aatattgtac cattaaagag 2300  
 tttggatgtg taacttgtga tgccttagaa aaatataccta agcacaaaat 2350  
 aaacctttct aaccacttca ttaaagctga aaaaaaaaaa aaaaaaa 2397

<210> 325

<211> 280

<212> PRT

<213> Homo Sapien

<400> 325

Met Ala Pro Ser Gly Ser Leu Ala Val Pro Leu Ala Val Leu Val  
 1 5 10 15

Leu Leu Leu Trp Gly Ala Pro Trp Thr His Gly Arg Arg Ser Asn  
 20 25 30

Val Arg Val Ile Thr Asp Glu Asn Trp Arg Glu Leu Leu Glu Gly  
 35 40 45

Asp Trp Met Ile Glu Phe Tyr Ala Pro Trp Cys Pro Ala Cys Gln  
 50 55 60

Asn Leu Gln Pro Glu Trp Glu Ser Phe Ala Glu Trp Gly Glu Asp  
 65 70 75

Leu Glu Val Asn Ile Ala Lys Val Asp Val Thr Glu Gln Pro Gly  
 Page 210

P1618P2C2 sequence listing.txt

80

85

90

Leu Ser Gly Arg Phe Ile Ile Thr Ala Leu Pro Thr Ile Tyr His  
95 100 105

Cys Lys Asp Gly Glu Phe Arg Arg Tyr Gln Gly Pro Arg Thr Lys  
110 115 120

Lys Asp Phe Ile Asn Phe Ile Ser Asp Lys Glu Trp Lys Ser Ile  
125 130 135

Glu Pro Val Ser Ser Trp Phe Gly Pro Gly Ser Val Leu Met Ser  
140 145 150

Ser Met Ser Ala Leu Phe Gln Leu Ser Met Trp Ile Arg Thr Cys  
155 160 165

His Asn Tyr Phe Ile Glu Asp Leu Gly Leu Pro Val Trp Gly Ser  
170 175 180

Tyr Thr Val Phe Ala Leu Ala Thr Leu Phe Ser Gly Leu Leu Leu  
185 190 195

Gly Leu Cys Met Ile Phe Val Ala Asp Cys Leu Cys Pro Ser Lys  
200 205 210

Arg Arg Arg Pro Gln Pro Tyr Pro Tyr Pro Ser Lys Lys Leu Leu  
215 220 225

Ser Glu Ser Ala Gln Pro Leu Lys Lys Val Glu Glu Glu Gln Glu  
230 235 240

Ala Asp Glu Glu Asp Val Ser Glu Glu Glu Ala Glu Ser Lys Glu  
245 250 255

Gly Thr Asn Lys Asp Phe Pro Gln Asn Ala Ile Arg Gln Arg Ser  
260 265 270

Leu Gly Pro Ser Leu Ala Thr Asp Lys Ser  
275 280

<210> 326

<211> 23

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic Oligonucleotide Probe

<400> 326

tgaggtgggc aagcggcgaa atg 23

<210> 327

<211> 20

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic Oligonucleotide Probe

<400> 327

tatgtggatc aggacgtgcc 20

P1618P2C2 sequence listing.txt

<210> 328  
 <211> 21  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Synthetic Oligonucleotide Probe

<400> 328  
 tgcagggttc agtctagatt g 21

<210> 329  
 <211> 25  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Synthetic Oligonucleotide Probe

<400> 329  
 ttgaaggaca aaggcaatct gccac 25

<210> 330  
 <211> 45  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Synthetic Oligonucleotide Probe

<400> 330  
 ggagtccttg agttcccctg gcagtcctgg tgctgttgct ttggg 45

<210> 331  
 <211> 2168  
 <212> DNA  
 <213> Homo Sapien

<400> 331  
 gcgagtgtcc agctgcggag acccgtgata attcggttaac taattcaaca 50  
 aacgggaccc ttctgtgtgc cagaaaccgc aagcagttgc taaccagtg 100  
 ggacaggcgg attggaagag cgggaaggtc ctggcccaga gcagtgtgac 150  
 acttccctct gtgaccatga aactctgggt gtctgcattg ctgatggcct 200  
 ggtttggtgt cctgagctgt gtgcaggccg aattcttcac ctctattggg 250  
 cacatgactg acctgattta tgcagagaaa gagctggtgc agtctctgaa 300  
 agagtacatc cttgtggagg aagccaagct ttccaagatt aagagctggg 350  
 ccaacaaaat ggaagccttg actagcaagt cagctgctga tgctgagggc 400  
 tacctggctc accctgtgaa tgcctacaaa ctggtgaagc ggctaaacac 450  
 agactggcct gcgctggagg accttgtcct gcaggactca gctgcaggtt 500  
 ttatcgccaa cctctctgtg cagcggcagt tcttccccac tgatgaggac 550  
 gagataggag ctgccaaagc cctgatgaga cttcaggaca catacaggct 600

P1618P2C2 sequence listing.txt

```

ggacccaggc acaatttcca gaggggaact tccaggaacc aagtaccagg 650
caatgctgag tgtggatgac tgctttggga tgggccgctc ggcctacaat 700
gaaggggact attatcatac ggtgttgtgg atggagcagg tgctaaagca 750
gcttgatgcc ggggaggagg ccaccacaac caagtcacag gtgctggact 800
acctcagcta tgctgtcttc cagtgggtg atctgcaccg tgccctggag 850
ctcaccgcc gcctgtcttc ccttgacca agccacgaac gagctggagg 900
gaatctgcgg tactttgagc agttattgga ggaagagaga gaaaaaacgt 950
taacaaatca gacagaagct gagctagcaa cccagaagg catctatgag 1000
aggcctgtgg actacctgcc tgagagggat gtttacgaga gcctctgtcg 1050
tggggagggg gtcaaaactga cccccgtag acagaagagg cttttctgta 1100
ggtaccacca tggcaacagg gccccacagc tgctcattgc ccccttcaa 1150
gaggaggacg agtgggacag cccgcacatc gtcaggtagt acgatgtcat 1200
gtctgatgag gaaatcgaga ggatcaagga gatcgcaaaa cctaaacttg 1250
cacgagccac cgttcgtgat cccaagacag gagtcctcac tgtcgccagc 1300
taccgggttt caaaagctc ctggctagag gaagatgatg accctgttgt 1350
ggcccagata aatcgtcgga tgcagcatat cacagggtta acagtaaaga 1400
ctgcagaatt gttacagggt gcaaattatg gagtgggagg acagtatgaa 1450
ccgcacttcg acttctctag gcgacctttt gacagcggcc taaaacaga 1500
ggggaatagg ttagcgacgt ttcttaacta catgagtgat gtagaagctg 1550
gtggtgccac cgtcttcctt gatctggggg ctgcaatttg gcctaagaag 1600
ggtacagctg tgttctggta caacctcttg cggagcgggg aaggtagacta 1650
ccgaacaaga catgctgcct gccctgtgct tgtgggctgc aagtgggtct 1700
ccaataagtg gttccatgaa cgaggacagg agttcttgag acctgtgga 1750
tcaacagaag ttgactgaca tccttttctg tccttcccct tcctggtcct 1800
tcagcccatg tcaacgtgac agacaccttt gtatgttcct ttgtatgttc 1850
ctatcaggct gatttttgga gaaatgaatg tttgtctgga gcagagggag 1900
accatactag ggcgactcct gtgtgactga agtcccagcc cttccattca 1950
gcctgtgcca tccctggccc caaggctagg atcaaagtgg ctgcagcaga 2000
gtagctgtc tagcgctag caagggtcct ttgtacctca ggtgttttag 2050
gtgtgagatg tttcagtga ccaaagttct gataccttgt ttacatgttt 2100
gtttttatgg catttctatc tattgtggct ttacaaaaaa ataaaatgtc 2150
cctaccagaa aaaaaaaaa 2168

```

P1618P2C2 sequence listing.txt

<210> 332  
 <211> 533  
 <212> PRT  
 <213> Homo Sapien

<400> 332

Met	Lys	Leu	Trp	Val	Ser	Ala	Leu	Leu	Met	Ala	Trp	Phe	Gly	Val	1	5	10	15
Leu	Ser	Cys	Val	Gln	Ala	Glu	Phe	Phe	Thr	Ser	Ile	Gly	His	Met	20	25	30	
Thr	Asp	Leu	Ile	Tyr	Ala	Glu	Lys	Glu	Leu	Val	Gln	Ser	Leu	Lys	35	40	45	
Glu	Tyr	Ile	Leu	Val	Glu	Glu	Ala	Lys	Leu	Ser	Lys	Ile	Lys	Ser	50	55	60	
Trp	Ala	Asn	Lys	Met	Glu	Ala	Leu	Thr	Ser	Lys	Ser	Ala	Ala	Asp	65	70	75	
Ala	Glu	Gly	Tyr	Leu	Ala	His	Pro	Val	Asn	Ala	Tyr	Lys	Leu	Val	80	85	90	
Lys	Arg	Leu	Asn	Thr	Asp	Trp	Pro	Ala	Leu	Glu	Asp	Leu	Val	Leu	95	100	105	
Gln	Asp	Ser	Ala	Ala	Gly	Phe	Ile	Ala	Asn	Leu	Ser	Val	Gln	Arg	110	115	120	
Gln	Phe	Phe	Pro	Thr	Asp	Glu	Asp	Glu	Ile	Gly	Ala	Ala	Lys	Ala	125	130	135	
Leu	Met	Arg	Leu	Gln	Asp	Thr	Tyr	Arg	Leu	Asp	Pro	Gly	Thr	Ile	140	145	150	
Ser	Arg	Gly	Glu	Leu	Pro	Gly	Thr	Lys	Tyr	Gln	Ala	Met	Leu	Ser	155	160	165	
Val	Asp	Asp	Cys	Phe	Gly	Met	Gly	Arg	Ser	Ala	Tyr	Asn	Glu	Gly	170	175	180	
Asp	Tyr	Tyr	His	Thr	Val	Leu	Trp	Met	Glu	Gln	Val	Leu	Lys	Gln	185	190	195	
Leu	Asp	Ala	Gly	Glu	Glu	Ala	Thr	Thr	Thr	Lys	Ser	Gln	Val	Leu	200	205	210	
Asp	Tyr	Leu	Ser	Tyr	Ala	Val	Phe	Gln	Leu	Gly	Asp	Leu	His	Arg	215	220	225	
Ala	Leu	Glu	Leu	Thr	Arg	Arg	Leu	Leu	Ser	Leu	Asp	Pro	Ser	His	230	235	240	
Glu	Arg	Ala	Gly	Gly	Asn	Leu	Arg	Tyr	Phe	Glu	Gln	Leu	Leu	Glu	245	250	255	
Glu	Glu	Arg	Glu	Lys	Thr	Leu	Thr	Asn	Gln	Thr	Glu	Ala	Glu	Leu	260	265	270	
Ala	Thr	Pro	Glu	Gly	Ile	Tyr	Glu	Arg	Pro	Val	Asp	Tyr	Leu	Pro	275	280	285	

P1618P2C2 sequence listing.txt

Glu Arg Asp Val	Tyr	Glu Ser Leu Cys	Arg	Gly Glu Gly Val	Lys
	290		295		300
Leu Thr Pro Arg	Arg	Gln Lys Arg Leu	Phe	Cys Arg Tyr His	His
	305		310		315
Gly Asn Arg Ala	Pro	Gln Leu Leu Ile	Ala	Pro Phe Lys Glu	Glu
	320		325		330
Asp Glu Trp Asp	Ser	Pro His Ile Val	Arg	Tyr Tyr Asp Val	Met
	335		340		345
Ser Asp Glu Glu	Ile	Glu Arg Ile Lys	Glu	Ile Ala Lys Pro	Lys
	350		355		360
Leu Ala Arg Ala	Thr	Val Arg Asp Pro	Lys	Thr Gly Val Leu	Thr
	365		370		375
Val Ala Ser Tyr	Arg	Val Ser Lys Ser	Ser	Trp Leu Glu Glu	Asp
	380		385		390
Asp Asp Pro Val	Val	Ala Arg Val Asn	Arg	Arg Met Gln His	Ile
	395		400		405
Thr Gly Leu Thr	Val	Lys Thr Ala Glu	Leu	Leu Gln Val Ala	Asn
	410		415		420
Tyr Gly Val Gly	Gly	Gln Tyr Glu Pro	His	Phe Asp Phe Ser	Arg
	425		430		435
Arg Pro Phe Asp	Ser	Gly Leu Lys Thr	Glu	Gly Asn Arg Leu	Ala
	440		445		450
Thr Phe Leu Asn	Tyr	Met Ser Asp Val	Glu	Ala Gly Gly Ala	Thr
	455		460		465
Val Phe Pro Asp	Leu	Gly Ala Ala Ile	Trp	Pro Lys Lys Gly	Thr
	470		475		480
Ala Val Phe Trp	Tyr	Asn Leu Leu Arg	Ser	Gly Glu Gly Asp	Tyr
	485		490		495
Arg Thr Arg His	Ala	Ala Cys Pro Val	Leu	Val Gly Cys Lys	Trp
	500		505		510
Val Ser Asn Lys	Trp	Phe His Glu Arg	Gly	Gln Glu Phe Leu	Arg
	515		520		525
Pro Cys Gly Ser	Thr	Glu Val Asp			
	530				

<210> 333

<211> 18

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic Oligonucleotide Probe

<400> 333

ccaggcaca tttccaga 18

P1618P2C2 sequence listing.txt

<210> 334  
<211> 19  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Synthetic Oligonucleotide Probe

<400> 334  
ggacccttct gtgtgccag 19

<210> 335  
<211> 19  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Synthetic Oligonucleotide Probe

<400> 335  
ggtctcaaga actcctgtc 19

<210> 336  
<211> 24  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Synthetic Oligonucleotide Probe

<400> 336  
acactcagca ttgcctggta cttg 24

<210> 337  
<211> 45  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Synthetic Oligonucleotide Probe

<400> 337  
gggcacatga ctgacctgat ttatgcagag aaagagctgg tgcag 45

<210> 338  
<211> 2789  
<212> DNA  
<213> Homo Sapien

<400> 338  
gcagtattga gttttacttc ctcctctttt tagtggaaga cagaccataa 50  
tcccagtggt agtgaaattg attgtttcat ttattaccgt tttggctggg 100  
ggttagttcc gacaccttca cagttgaaga gcaggcagaa ggagttgtga 150  
agacaggaca atcttcttgg ggatgctggc cctggaagcc agcgggcctt 200  
gctctgtctt tggcctcatt gacccaggt tctctggtta aaactgaaag 250  
cctactactg gcctgggtgcc catcaatcca ttgatccttg aggctgtgcc 300  
cctggggcac ccacctggca gggcctacca ccatgcgact gagctccctg 350



P1618P2C2 sequence listing.txt

ttggctctgc tgcggccagc gcttcccctc atcttagggc tgtctctggg 400  
 gtgcagcctg agcctcctgc gggtttcctg gatccagggg gagggagaag 450  
 atccctgtgt cgaggctgta ggggagcgag gagggccaca gaatccagat 500  
 tcgagagctc ggctagacca aagtgatgaa gacttcaaac cccggattgt 550  
 cccctactac agggacccca acaagcccta caagaagggtg ctcaggactc 600  
 ggtacatcca gacagagctg ggctcccgtg agcggttgct ggtggctgtc 650  
 ctgacctccc gagctacact gtccactttg gccgtggctg tgaaccgtac 700  
 ggtggcccat cacttccctc ggttactcta cttactggg cagcgggggg 750  
 cccgggctcc agcagggatg cagggtgtgt ctcatgggga tgagcggccc 800  
 gcctggctca tgtcagagac cctgcgccac cttcacacac actttggggc 850  
 cgactacgac tggttcttca tcatgcagga tgacacatat gtgcaggccc 900  
 cccgcctggc agcccttgct ggccacctca gcatcaacca agacctgtac 950  
 ttagggccggg cagaggagt cttggcgca ggcgagcagg cccggtactg 1000  
 tcatgggggc tttggctacc tgtgtcacg gagtctcctg cttcgtctgc 1050  
 ggccacatct ggatggctgc cgaggagaca ttctcagtgc ccgtcctgac 1100  
 gagtggcttg gacgctgcct cattgactct ctgggcgtcg gctgtgtctc 1150  
 acagcaccag gggcagcagt atcgctcatt tgaactggcc aaaaataggg 1200  
 accctgagaa ggaagggagc tcggctttcc tgagtgcctt cgccgtgcac 1250  
 cctgtctccg aaggtaccct catgtaccgg ctccacaaac gcttcagcgc 1300  
 tctggagttg gagcgggctt acagtgaat agaacaactg caggctcaga 1350  
 tccggaacct gaccgtgctg acccccgaag gggaggcagg gctgagctgg 1400  
 cccgttgggc tccctgctcc tttcacacca cactctcgct ttgaggtgct 1450  
 gggctgggac tacttcacag agcagcacac cttctcctgt gcagatgggg 1500  
 ctccaagtg cccactacag ggggctagca gggcggacgt gggatgatgcg 1550  
 ttggagactg ccctggagca gctcaatcgg cgctatcagc cccgcctgcg 1600  
 cttccagaag cagcgactgc tcaacggcta tcggcgcttc gaccagcac 1650  
 ggggcatgga gtacaccctg gacctgctgt tggaatgtgt gacacagcgt 1700  
 gggcaccggc gggccctggc tcgcagggtc agcctgctgc ggccactgag 1750  
 ccgggtggaa atcctaccta tgccctatgt cactgaggcc acccgagtgc 1800  
 agctggtgct gccactcctg gtggctgaag ctgctgcagc cccggctttc 1850  
 ctcgaggcgt ttgcagccaa tgtcctggag ccacgagaac atgcattgct 1900

P1618P2C2 sequence listing.txt

caccctgttg ctggtctacg ggccacgaga aggtggccgt ggagctccag 1950  
 acccatttct tgggggtgaag gctgcagcag cggagttaga gcgacggtac 2000  
 cctgggacga ggctggcctg gctcgctgtg cgagcagagg ccccttccca 2050  
 ggtgcgactc atggacgtgg tctcgaagaa gcaccctgtg gacactctct 2100  
 tcttccttac caccgtgtgg acaaggcctg ggcccgaagt cctcaaccgc 2150  
 tgtcgcatga atgccatctc tggctggcag gccttctttc cagtccattt 2200  
 ccaggagttc aatcctgccc tgtcaccaca gagatcacc ccaggggccc 2250  
 cgggggctgg ccctgacccc cctccctc ctggtgctga cccctcccgg 2300  
 ggggctccta taggggggag atttgaccgg caggcttctg cggagggctg 2350  
 cttctacaac gctgactacc tggcggcccg agcccggctg gcagggaac 2400  
 tggcaggcca ggaagaggag gaagccctgg aggggctgga ggtgatggat 2450  
 gttttcctcc ggttctcagg gctccacctc tttcgggccg tagagccagg 2500  
 gctggtgcag aagttctccc tgcgagactg cagcccacgg ctcagtgaag 2550  
 aactctacca ccgctgccgc ctcagcaacc tggaggggct agggggccgt 2600  
 gccagctgg ctatggctct ctttgagcag gacgaggcca atagcactta 2650  
 gccgcctgg gggccctaac ctcattacct ttcctttgtc tgcctcagcc 2700  
 ccaggaaggg caaggcaaga tggcggacag atagagaatt gttgctgtat 2750  
 tttttaaata tgaaaatgtt attaaacatg tcttctgcc 2789

<210> 339

<211> 772

<212> PRT

<213> Homo Sapien

<400> 339

Met	Arg	Leu	Ser	Ser	Leu	Leu	Ala	Leu	Leu	Arg	Pro	Ala	Leu	Pro
1				5					10					15
Leu	Ile	Leu	Gly	Leu	Ser	Leu	Gly	Cys	Ser	Leu	Ser	Leu	Leu	Arg
			20						25					30
Val	Ser	Trp	Ile	Gln	Gly	Glu	Gly	Glu	Asp	Pro	Cys	Val	Glu	Ala
				35					40					45
Val	Gly	Glu	Arg	Gly	Gly	Pro	Gln	Asn	Pro	Asp	Ser	Arg	Ala	Arg
				50					55					60
Leu	Asp	Gln	Ser	Asp	Glu	Asp	Phe	Lys	Pro	Arg	Ile	Val	Pro	Tyr
				65					70					75
Tyr	Arg	Asp	Pro	Asn	Lys	Pro	Tyr	Lys	Lys	Val	Leu	Arg	Thr	Arg
				80					85					90
Tyr	Ile	Gln	Thr	Glu	Leu	Gly	Ser	Arg	Glu	Arg	Leu	Leu	Val	Ala
				95					100					105

P1618P2C2 sequence listing.txt

Val Leu Thr Ser	Arg Ala Thr Leu Ser	Thr Leu Ala Val Ala Val	110	115	120
Asn Arg Thr Val	Ala His His Phe Pro Arg	Leu Leu Tyr Phe Thr	125	130	135
Gly Gln Arg Gly	Ala Arg Ala Pro Ala Gly	Met Gln Val Val Ser	140	145	150
His Gly Asp Glu	Arg Pro Ala Trp Leu Met	Ser Glu Thr Leu Arg	155	160	165
His Leu His Thr	His Phe Gly Ala Asp Tyr	Asp Trp Phe Phe Ile	170	175	180
Met Gln Asp Asp	Thr Tyr Val Gln Ala Pro	Arg Leu Ala Ala Leu	185	190	195
Ala Gly His Leu	Ser Ile Asn Gln Asp Leu	Tyr Leu Gly Arg Ala	200	205	210
Glu Glu Phe Ile	Gly Ala Gly Glu Gln Ala	Arg Tyr Cys His Gly	215	220	225
Gly Phe Gly Tyr	Leu Leu Ser Arg Ser Leu	Leu Leu Arg Leu Arg	230	235	240
Pro His Leu Asp	Gly Cys Arg Gly Asp Ile	Leu Ser Ala Arg Pro	245	250	255
Asp Glu Trp Leu	Gly Arg Cys Leu Ile Asp	Ser Leu Gly Val Gly	260	265	270
Cys Val Ser Gln	His Gln Gly Gln Gln Tyr	Arg Ser Phe Glu Leu	275	280	285
Ala Lys Asn Arg	Asp Pro Glu Lys Glu Gly	Ser Ser Ala Phe Leu	290	295	300
Ser Ala Phe Ala	Val His Pro Val Ser Glu	Gly Thr Leu Met Tyr	305	310	315
Arg Leu His Lys	Arg Phe Ser Ala Leu Glu	Leu Glu Arg Ala Tyr	320	325	330
Ser Glu Ile Glu	Gln Leu Gln Ala Gln Ile	Arg Asn Leu Thr Val	335	340	345
Leu Thr Pro Glu	Gly Glu Ala Gly Leu Ser	Trp Pro Val Gly Leu	350	355	360
Pro Ala Pro Phe	Thr Pro His Ser Arg Phe	Glu Val Leu Gly Trp	365	370	375
Asp Tyr Phe Thr	Glu Gln His Thr Phe Ser	Cys Ala Asp Gly Ala	380	385	390
Pro Lys Cys Pro	Leu Gln Gly Ala Ser Arg	Ala Asp Val Gly Asp	395	400	405
Ala Leu Glu Thr	Ala Leu Glu Gln Leu Asn	Arg Arg Tyr Gln Pro	410	415	420

P1618P2C2 sequence listing.txt

Arg Leu Arg Phe	Gln Lys Gln Arg Leu	Leu Asn Gly Tyr Arg	Arg
425		430	435
Phe Asp Pro Ala	Arg Gly Met Glu Tyr	Thr Leu Asp Leu Leu	Leu
440		445	450
Glu Cys Val Thr	Gln Arg Gly His Arg	Arg Ala Leu Ala Arg	Arg
455		460	465
Val Ser Leu Leu	Arg Pro Leu Ser Arg	Val Glu Ile Leu Pro	Met
470		475	480
Pro Tyr Val Thr	Glu Ala Thr Arg Val	Gln Leu Val Leu Pro	Leu
485		490	495
Leu Val Ala Glu	Ala Ala Ala Ala Pro	Ala Phe Leu Glu Ala	Phe
500		505	510
Ala Ala Asn Val	Leu Glu Pro Arg Glu	His Ala Leu Leu Thr	Leu
515		520	525
Leu Leu Val Tyr	Gly Pro Arg Glu Gly	Gly Arg Gly Ala Pro	Asp
530		535	540
Pro Phe Leu Gly	Val Lys Ala Ala Ala	Ala Glu Leu Glu Arg	Arg
545		550	555
Tyr Pro Gly Thr	Arg Leu Ala Trp Leu	Ala Val Arg Ala Glu	Ala
560		565	570
Pro Ser Gln Val	Arg Leu Met Asp Val	Val Ser Lys Lys His	Pro
575		580	585
Val Asp Thr Leu	Phe Phe Leu Thr Thr	Val Trp Thr Arg Pro	Gly
590		595	600
Pro Glu Val Leu	Asn Arg Cys Arg Met	Asn Ala Ile Ser Gly	Trp
605		610	615
Gln Ala Phe Phe	Pro Val His Phe Gln	Glu Phe Asn Pro Ala	Leu
620		625	630
Ser Pro Gln Arg	Ser Pro Pro Gly Pro	Pro Gly Ala Gly Pro	Asp
635		640	645
Pro Pro Ser Pro	Pro Gly Ala Asp Pro	Ser Arg Gly Ala Pro	Ile
650		655	660
Gly Gly Arg Phe	Asp Arg Gln Ala Ser	Ala Glu Gly Cys Phe	Tyr
665		670	675
Asn Ala Asp Tyr	Leu Ala Ala Arg Ala	Arg Leu Ala Gly Glu	Leu
680		685	690
Ala Gly Gln Glu	Glu Glu Glu Ala Leu	Glu Gly Leu Glu Val	Met
695		700	705
Asp Val Phe Leu	Arg Phe Ser Gly Leu	His Leu Phe Arg Ala	Val
710		715	720
Glu Pro Gly Leu	Val Gln Lys Phe Ser	Leu Arg Asp Cys Ser	Pro
725		730	735

P1618P2C2 sequence listing.txt

Arg Leu Ser Glu Glu Leu Tyr His Arg Cys Arg Leu Ser Asn Leu  
740 745 750

Glu Gly Leu Gly Gly Arg Ala Gln Leu Ala Met Ala Leu Phe Glu  
755 760 765

Gln Glu Gln Ala Asn Ser Thr  
770

<210> 340

<211> 1572

<212> DNA

<213> Homo Sapien

<400> 340

cggagtgggtg cgccaacgtg agaggaaacc cgtgcgcggc tgcgctttcc 50  
tgtccccaag ccgttctaga cgcgggaaaa atgctttctg aaagcagctc 100  
ctttttgaag ggtgtgatgc ttggaagcat tttctgtgct ttgatcacta 150  
tgctaggaca cattaggatt ggtcatggaa atagaatgca ccaccatgag 200  
catcatcacc tacaagctcc taacaaagaa gatattctga aaatttcaga 250  
ggatgagcgc atggagctca gtaagagctt tcgagtatac tgtattatcc 300  
ttgtaaaacc caaagatgtg agtctttggg ctgcagtaaa ggagacttgg 350  
accaaact gtgacaaagc agagtcttc agttctgaaa atgttaaagt 400  
gtttgagtca attaatatgg acacaaatga catgtggtta atgatgagaa 450  
aagcttaca atacgccttt gataagtata gagaccaata caactggttc 500  
ttccttgac gccccactac gtttgctatc attgaaaacc taaagtattt 550  
tttgtaaaa aaggatccat cacagccttt ctatctaggc cacactataa 600  
aatctggaga ctttgaatat gtgggtatgg aaggaggaat tgtcttaagt 650  
gtagaatcaa tgaagagact taacagcctt ctcaatatcc cagaaaagt 700  
tcctgaacag ggagggatga ttggaagat atctgaagat aaacagctag 750  
cagtttgct gaaatatgct ggagtatttg cagaaaatgc agaagatgct 800  
gatggaaaag atgtatttaa taccaaact gttgggcttt ctattaaaga 850  
ggcaatgact tatcaccca accaggtagt agaaggctgt tggtcagata 900  
tggctgttac ttttaatgga ctgactcaa atcagatgca tgtgatgatg 950  
tatggggtat accgccttag ggcatttggg catattttca atgatgcatt 1000  
ggttttctta cctccaaatg gttctgacaa tgactgagaa gtggtagaaa 1050  
agcgtgaata tgatctttgt ataggacgtg tgttgcatt attttagta 1100  
gtaactacat atccaatata gctgtatgtt tctttttctt ttctaatttg 1150  
gtggcactgg tataaccaca cattaaagtc agtagtacat ttttaaatga 1200

P1618P2C2 sequence listing.txt

gggtggtttt tttctttaaa acacatgaac attgtaaatg tgttggaaag 1250  
aagtgtttta agaataataa ttttgcaaat aaactattaa taaatattat 1300  
atgtgataaa ttctaaatta tgaacattag aaatctgtgg ggcacatatt 1350  
tttgctgatt gggttaaaaaa ttttaacagg tcttttagcgt tctaagatat 1400  
gcaaatagata tctctagttg tgaatttgtg attaaagtaa aacttttagc 1450  
tgtgtgttcc ctttacttct aatactgatt tatgttctaa gcctccccaa 1500  
gttccaatgg atttgccttc tcaaaatgta caactaagca actaaagaaa 1550  
attaaagtga aagttgaaaa at 1572

<210> 341

<211> 318

<212> PRT

<213> Homo Sapien

<400> 341

Met	Leu	Ser	Glu	Ser	Ser	Ser	Phe	Leu	Lys	Gly	Val	Met	Leu	Gly	1	5	10	15
Ser	Ile	Phe	Cys	Ala	Leu	Ile	Thr	Met	Leu	Gly	His	Ile	Arg	Ile	20	25	30	
Gly	His	Gly	Asn	Arg	Met	His	His	His	Glu	His	His	His	Leu	Gln	35	40	45	
Ala	Pro	Asn	Lys	Glu	Asp	Ile	Leu	Lys	Ile	Ser	Glu	Asp	Glu	Arg	50	55	60	
Met	Glu	Leu	Ser	Lys	Ser	Phe	Arg	Val	Tyr	Cys	Ile	Ile	Leu	Val	65	70	75	
Lys	Pro	Lys	Asp	Val	Ser	Leu	Trp	Ala	Ala	Val	Lys	Glu	Thr	Trp	80	85	90	
Thr	Lys	His	Cys	Asp	Lys	Ala	Glu	Phe	Phe	Ser	Ser	Glu	Asn	Val	95	100	105	
Lys	Val	Phe	Glu	Ser	Ile	Asn	Met	Asp	Thr	Asn	Asp	Met	Trp	Leu	110	115	120	
Met	Met	Arg	Lys	Ala	Tyr	Lys	Tyr	Ala	Phe	Asp	Lys	Tyr	Arg	Asp	125	130	135	
Gln	Tyr	Asn	Trp	Phe	Phe	Leu	Ala	Arg	Pro	Thr	Thr	Phe	Ala	Ile	140	145	150	
Ile	Glu	Asn	Leu	Lys	Tyr	Phe	Leu	Leu	Lys	Lys	Asp	Pro	Ser	Gln	155	160	165	
Pro	Phe	Tyr	Leu	Gly	His	Thr	Ile	Lys	Ser	Gly	Asp	Leu	Glu	Tyr	170	175	180	
Val	Gly	Met	Glu	Gly	Gly	Ile	Val	Leu	Ser	Val	Glu	Ser	Met	Lys	185	190	195	
Arg	Leu	Asn	Ser	Leu	Leu	Asn	Ile	Pro	Glu	Lys	Cys	Pro	Glu	Gln	200	205	210	

P1618P2C2 sequence listing.txt

Gly Gly Met Ile Trp Lys Ile Ser Glu Asp Lys Gln Leu Ala Val  
215 220 225  
Cys Leu Lys Tyr Ala Gly Val Phe Ala Glu Asn Ala Glu Asp Ala  
230 235 240  
Asp Gly Lys Asp Val Phe Asn Thr Lys Ser Val Gly Leu Ser Ile  
245 250 255  
Lys Glu Ala Met Thr Tyr His Pro Asn Gln Val Val Glu Gly Cys  
260 265 270  
Cys Ser Asp Met Ala Val Thr Phe Asn Gly Leu Thr Pro Asn Gln  
275 280 285  
Met His Val Met Met Tyr Gly Val Tyr Arg Leu Arg Ala Phe Gly  
290 295 300  
His Ile Phe Asn Asp Ala Leu Val Phe Leu Pro Pro Asn Gly Ser  
305 310 315

Asp Asn Asp

<210> 342  
<211> 23  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Synthetic Oligonucleotide Probe

<400> 342  
tccccaagcc gttctagacg cgg 23

<210> 343  
<211> 18  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Synthetic Oligonucleotide Probe

<400> 343  
ctggttcttc cttgcacg 18

<210> 344  
<211> 28  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Synthetic Oligonucleotide Probe

<400> 344  
gcccaaagtc cctaaggcgg tatacccc 28

<210> 345  
<211> 50  
<212> DNA  
<213> Artificial Sequence

P1618P2C2 sequence listing.txt

<220>  
<223> Synthetic Oligonucleotide Probe  
  
<400> 345  
gggtgtgatg cttggaagca ttttctgtgc tttgatcact atgctaggac 50  
  
<210> 346  
<211> 25  
<212> DNA  
<213> Artificial Sequence  
  
<220>  
<223> Synthetic Oligonucleotide Probe  
  
<400> 346  
gggatgcagg tgggtgtctca tgggg 25  
  
<210> 347  
<211> 18  
<212> DNA  
<213> Artificial Sequence  
  
<220>  
<223> Synthetic Oligonucleotide Probe  
  
<400> 347  
ccctcatgta ccggctcc 18  
  
<210> 348  
<211> 48  
<212> DNA  
<213> Artificial Sequence  
  
<220>  
<223> Synthetic Oligonucleotide Probe  
  
<400> 348  
ggattctaatac gactcact atagggctca gaaaagcgca acagagaa 48  
  
<210> 349  
<211> 47  
<212> DNA  
<213> Artificial Sequence  
  
<220>  
<223> Synthetic Oligonucleotide Probe  
  
<400> 349  
ctatgaaatt aaccctcact aaagggatgt cttccatgcc aaccttc 47  
  
<210> 350  
<211> 48  
<212> DNA  
<213> Artificial Sequence  
  
<220>  
<223> Synthetic Oligonucleotide Probe  
  
<400> 350  
ggattctaatac gactcact atagggcggc gatgtccact ggggctac 48  
  
<210> 351  
<211> 48



P1618P2C2 sequence listing.txt

<212> DNA  
<213> Artificial Sequence  
  
<220>  
<223> Synthetic Oligonucleotide Probe  
  
<400> 351  
ctatgaaatt aaccctcact aaagggacga ggaagatggg cggatggt 48  
  
<210> 352  
<211> 47  
<212> DNA  
<213> Artificial Sequence  
  
<220>  
<223> Synthetic Oligonucleotide Probe  
  
<400> 352  
ggattctaatac gactcact atagggcacc cacgcgtccg gctgctt 47  
  
<210> 353  
<211> 48  
<212> DNA  
<213> Artificial Sequence  
  
<220>  
<223> Synthetic Oligonucleotide Probe  
  
<400> 353  
ctatgaaatt aaccctcact aaagggacgg gggacaccac ggaccaga 48  
  
<210> 354  
<211> 48  
<212> DNA  
<213> Artificial Sequence  
  
<220>  
<223> Synthetic Oligonucleotide Probe  
  
<400> 354  
ggattctaatac gactcact atagggcttg ctgcggtttt tgttcctg 48  
  
<210> 355  
<211> 48  
<212> DNA  
<213> Artificial Sequence  
  
<220>  
<223> Synthetic Oligonucleotide Probe  
  
<400> 355  
ctatgaaatt aaccctcact aaagggagct gccgatccca ctggtatt 48  
  
<210> 356  
<211> 46  
<212> DNA  
<213> Artificial Sequence  
  
<220>  
<223> Synthetic Oligonucleotide Probe  
  
<400> 356  
ggattctaatac gactcact atagggcgga tcctggccgg cctctg 46

P1618P2C2 sequence listing.txt

<210> 357  
<211> 48  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Synthetic Oligonucleotide Probe

<400> 357  
ctatgaaatt aaccctcact aaagggagcc cgggcatggt ctcagtta 48

<210> 358  
<211> 47  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Synthetic Oligonucleotide Probe

<400> 358  
ggatttctaatt acgactcact atagggcggg aagatggcga ggaggag 47

<210> 359  
<211> 48  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Synthetic Oligonucleotide Probe

<400> 359  
ctatgaaatt aaccctcact aaagggacca aggccacaaa cggaatc 48

<210> 360  
<211> 48  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Synthetic Oligonucleotide Probe

<400> 360  
ggatttctaatt acgactcact atagggctgt gctttcattc tgccagta 48

<210> 361  
<211> 48  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Synthetic Oligonucleotide Probe

<400> 361  
ctatgaaatt aaccctcact aaagggaggg tacaattaag gggatggat 48

<210> 362  
<211> 47  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Synthetic Oligonucleotide Probe

P1618P2C2 sequence listing.txt

<400> 362  
ggattctaatacgcactcactatagggcccgctcgtcctgctcctg 47  
<210> 363  
<211> 48  
<212> DNA  
<213> Artificial Sequence  
<220>  
<223> Synthetic Oligonucleotide Probe  
<400> 363  
ctatgaaattaacccctcactaaagggagga ttgccgcgac cctcacag 48  
<210> 364  
<211> 47  
<212> DNA  
<213> Artificial Sequence  
<220>  
<223> Synthetic Oligonucleotide Probe  
<400> 364  
ggattctaatacgcactcactatagggcccc tctgccttc cctgtcc 47  
<210> 365  
<211> 48  
<212> DNA  
<213> Artificial Sequence  
<220>  
<223> Synthetic Oligonucleotide Probe  
<400> 365  
ctatgaaattaacccctcactaaagggagtg gtggccgcga ttatctgc 48  
<210> 366  
<211> 48  
<212> DNA  
<213> Artificial Sequence  
<220>  
<223> Synthetic Oligonucleotide Probe  
<400> 366  
ggattctaatacgcactcactatagggcgca gcgatggcag cgatgagg 48  
<210> 367  
<211> 47  
<212> DNA  
<213> Artificial Sequence  
<220>  
<223> Synthetic Oligonucleotide Probe  
<400> 367  
ctatgaaattaacccctcactaaagggacag acggggcaga gggagtg 47  
<210> 368  
<211> 47  
<212> DNA  
<213> Artificial Sequence

P1618P2C2 sequence listing.txt

<220>  
<223> Synthetic Oligonucleotide Probe  
  
<400> 368  
ggattctaatacgcactcactatagggccaggagcgtaggagaaac 47  
  
<210> 369  
<211> 48  
<212> DNA  
<213> Artificial Sequence  
  
<220>  
<223> Synthetic Oligonucleotide Probe  
  
<400> 369  
ctatgaaattaacccctcactaaagggaagacatgtcatcgggagtgg 48  
  
<210> 370  
<211> 48  
<212> DNA  
<213> Artificial Sequence  
  
<220>  
<223> Synthetic Oligonucleotide Probe  
  
<400> 370  
ggattctaatacgcactcactatagggccgggtggagggtggaacagaaa 48  
  
<210> 371  
<211> 48  
<212> DNA  
<213> Artificial Sequence  
  
<220>  
<223> Synthetic Oligonucleotide Probe  
  
<400> 371  
ctatgaaattaacccctcactaaagggaacacagacagagcccatatcgc 48  
  
<210> 372  
<211> 47  
<212> DNA  
<213> Artificial Sequence  
  
<220>  
<223> Synthetic Oligonucleotide Probe  
  
<400> 372  
ggattctaatacgcactcactatagggccagggaatccggatgtctc 47  
  
<210> 373  
<211> 48  
<212> DNA  
<213> Artificial Sequence  
  
<220>  
<223> Synthetic Oligonucleotide Probe  
  
<400> 373  
ctatgaaattaacccctcactaaagggaagtaggggatgccaccgagta 48  
  
<210> 374

P1618P2C2 sequence listing.txt

<211> 47  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Synthetic Oligonucleotide Probe

<400> 374  
ggattctaatac gactcact atagggccag ctacccgcag gaggagg 47

<210> 375  
<211> 48  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Synthetic Oligonucleotide Probe

<400> 375  
ctatgaaatt aaccctcact aaagggatcc caggtgatga ggtccaga 48

<210> 376  
<211> 997  
<212> DNA  
<213> Homo Sapien

<400> 376  
cccacgcgtc cgatcttacc acaaaaacac tcctgaggag aaagaaagag 50  
agggagggag agaaaaagag agagagagaa acaaaaaacc aaagagagag 100  
aaaaaatgaa ttcattctaaa tcatctgaaa cacaatgcac agagagagga 150  
tgctttctctt cccaaatgtt cttatggact gttgctggga tccccatcct 200  
attttctcagt gcctgtttca tcaccagatg tgttgtgaca tttcgcattct 250  
ttcaaacctg tgatgagaaa aagtttcagc tacctgagaa tttcacagag 300  
ctctcctgct acaattatgg atcagggttca gtcaagaatt gttgtccatt 350  
gaactgggaa tattttcaat ccagctgcta cttcttttct actgacacca 400  
tttcctgggc gttaagttaa aagaactgct cagccatggg ggctcacctg 450  
gtggttatca actcacagga ggagcaggaa ttcctttcct acaagaaacc 500  
taaaatgaga gagtttttta ttggactgtc agaccagggt gtcgaggggtc 550  
agtggcaatg ggtggacggc acacctttga caaagtctct gagcttcttg 600  
gatgtagggg agcccaacaa catagctacc ctggaggact gtgccaccat 650  
gagagactct tcaaacccaa ggcaaaattg gaatgatgta acctgtttcc 700  
tcaattatct tcggatttgt gaaatggtag gaataaatcc tttgaacaaa 750  
ggaaaatctc tttaagaaca gaaggcaca ctcaaatgtg taaagaagga 800  
agagcaagaa catggccaca cccaccgccc cacacgagaa atttgtgcgc 850  
tgaacttcaa aggacttcat aagtatttgt tactctgata caaataaaaa 900

P1618P2C2 sequence listing.txt

taagtagttt taaatgttaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 950

aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaa 997

<210> 377

<211> 219

<212> PRT

<213> Homo Sapien

<400> 377

Met Asn Ser Ser Lys Ser Ser Glu Thr Gln Cys Thr Glu Arg Gly  
1 5 10 15

Cys Phe Ser Ser Gln Met Phe Leu Trp Thr Val Ala Gly Ile Pro  
20 25 30

Ile Leu Phe Leu Ser Ala Cys Phe Ile Thr Arg Cys Val Val Thr  
35 40 45

Phe Arg Ile Phe Gln Thr Cys Asp Glu Lys Lys Phe Gln Leu Pro  
50 55 60

Glu Asn Phe Thr Glu Leu Ser Cys Tyr Asn Tyr Gly Ser Gly Ser  
65 70 75

Val Lys Asn Cys Cys Pro Leu Asn Trp Glu Tyr Phe Gln Ser Ser  
80 85 90

Cys Tyr Phe Phe Ser Thr Asp Thr Ile Ser Trp Ala Leu Ser Leu  
95 100 105

Lys Asn Cys Ser Ala Met Gly Ala His Leu Val Val Ile Asn Ser  
110 115 120

Gln Glu Glu Gln Glu Phe Leu Ser Tyr Lys Lys Pro Lys Met Arg  
125 130 135

Glu Phe Phe Ile Gly Leu Ser Asp Gln Val Val Glu Gly Gln Trp  
140 145 150

Gln Trp Val Asp Gly Thr Pro Leu Thr Lys Ser Leu Ser Phe Trp  
155 160 165

Asp Val Gly Glu Pro Asn Asn Ile Ala Thr Leu Glu Asp Cys Ala  
170 175 180

Thr Met Arg Asp Ser Ser Asn Pro Arg Gln Asn Trp Asn Asp Val  
185 190 195

Thr Cys Phe Leu Asn Tyr Phe Arg Ile Cys Glu Met Val Gly Ile  
200 205 210

Asn Pro Leu Asn Lys Gly Lys Ser Leu  
215

<210> 378

<211> 21

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic Oligonucleotide Probe

P1618P2C2 sequence listing.txt

<400> 378

ttcagcttct gggatgtagg g 21

<210> 379

<211> 24

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic Oligonucleotide Probe

<400> 379

tattcctacc atttcacaaa tccg 24

<210> 380

<211> 49

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic oligonucleotide probe

<400> 380

ggaggactgt gccacatga gagactcttc aaacccaagg caaaattgg 49

<210> 381

<211> 26

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic oligonucleotide probe

<400> 381

gcagattttg aggacagcca cctcca 26

<210> 382

<211> 18

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic oligonucleotide probe

<400> 382

ggccttgcag acaaccgt 18

<210> 383

<211> 21

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic oligonucleotide probe

<400> 383

cagactgagg gagatccgag a 21

<210> 384

<211> 20

<212> DNA

<213> Artificial Sequence

P1618P2C2 sequence listing.txt

<220>  
<223> Synthetic oligonucleotide probe

<400> 384  
cagctgccct tccccaacca 20

<210> 385  
<211> 18  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Synthetic oligonucleotide probe

<400> 385  
catcaagcgc ctctacca 18

<210> 386  
<211> 21  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Synthetic oligonucleotide probe

<400> 386  
cacaaactcg aactgcttct g 21

<210> 387  
<211> 18  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Synthetic oligonucleotide probe

<400> 387  
gggccatcac agctccct 18

<210> 388  
<211> 22  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Synthetic oligonucleotide probe

<400> 388  
gggatgtggt gaacacagaa ca 22

<210> 389  
<211> 22  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Synthetic oligonucleotide probe

<400> 389  
tgccagctgc atgctgccag tt 22

<210> 390  
<211> 20



P1618P2C2 sequence listing.txt

<212> DNA  
<213> Artificial Sequence  
  
<220>  
<223> Synthetic oligonucleotide probe  
  
<400> 390  
cagaaggatg tcccgtggaa 20  
  
<210> 391  
<211> 17  
<212> DNA  
<213> Artificial Sequence  
  
<220>  
<223> Synthetic oligonucleotide probe  
  
<400> 391  
gccgctgtcc actgcag 17  
  
<210> 392  
<211> 21  
<212> DNA  
<213> Artificial Sequence  
  
<220>  
<223> Synthetic oligonucleotide probe  
  
<400> 392  
gacggcatcc tcagggccac a 21  
  
<210> 393  
<211> 20  
<212> DNA  
<213> Artificial Sequence  
  
<220>  
<223> Synthetic oligonucleotide probe  
  
<400> 393  
atgtcctcca tgcccacgcg 20  
  
<210> 394  
<211> 20  
<212> DNA  
<213> Artificial Sequence  
  
<220>  
<223> Synthetic oligonucleotide probe  
  
<400> 394  
gagtgcgaca tcgagagctt 20  
  
<210> 395  
<211> 18  
<212> DNA  
<213> Artificial Sequence  
  
<220>  
<223> Synthetic oligonucleotide probe  
  
<400> 395  
ccgcagcctc agtgatga 18

P1618P2C2 sequence listing.txt

<210> 396  
<211> 21  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Synthetic oligonucleotide probe

<400> 396  
gaagagcaca gctgcagatc c 21

<210> 397  
<211> 22  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Synthetic oligonucleotide probe

<400> 397  
gaggtgtcct ggctttggta gt 22

<210> 398  
<211> 20  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Synthetic oligonucleotide probe

<400> 398  
cctctggcgc cccactcaa 20

<210> 399  
<211> 18  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Synthetic oligonucleotide probe

<400> 399  
ccaggagagc tggcgatg 18

<210> 400  
<211> 23  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Synthetic oligonucleotide probe

<400> 400  
gcaaattcag ggctcactag aga 23

<210> 401  
<211> 29  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Synthetic oligonucleotide probe

P1618P2C2 sequence listing.txt

<400> 401  
cacagagcat ttgtccatca gcagttcag 29  
<210> 402  
<211> 22  
<212> DNA  
<213> Artificial Sequence  
<220>  
<223> Synthetic oligonucleotide probe

<400> 402  
ggcagagact tccagtcact ga 22

<210> 403  
<211> 22  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Synthetic oligonucleotide probe

<400> 403  
gccaaggggtg gtgtagata gg 22

<210> 404  
<211> 24  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Synthetic oligonucleotide probe

<400> 404  
caggccccct tgatctgtac ccca 24

<210> 405  
<211> 23  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Synthetic oligonucleotide probe

<400> 405  
gggacgtgct tctacaagaa cag 23

<210> 406  
<211> 26  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Synthetic oligonucleotide probe

<400> 406  
caggcttaca atgttatgat cagaca 26

<210> 407  
<211> 31  
<212> DNA  
<213> Artificial Sequence

P1618P2C2 sequence listing.txt

<220>  
<223> Synthetic oligonucleotide probe

<400> 407  
tattcagagt tttccattgg cagtgccagt t 31

<210> 408  
<211> 21  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Synthetic oligonucleotide probe

<400> 408  
tctacatcag cctctctgcg c 21

<210> 409  
<211> 23  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Synthetic oligonucleotide probe

<400> 409  
cgatcttctc cacccaggag cgg 23

<210> 410  
<211> 18  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Synthetic oligonucleotide probe

<400> 410  
gccaggcctc acattcgt 18

<210> 411  
<211> 23  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Synthetic oligonucleotide probe

<400> 411  
ctccctgaat ggcagcctga gca 23

<210> 412  
<211> 24  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Synthetic oligonucleotide probe

<400> 412  
aggtgtttat taaggccta cgct 24

<210> 413

P1618P2C2 sequence listing.txt

<211> 19  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Synthetic oligonucleotide probe

<400> 413  
 cagagcagag ggtgccttg 19

<210> 414  
 <211> 21  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Synthetic oligonucleotide probe

<400> 414  
 tggcggagtc ccctcttggc t 21

<210> 415  
 <211> 22  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Synthetic oligonucleotide probe

<400> 415  
 ccctgtttcc ctatgcatca ct 22

<210> 416  
 <211> 21  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Synthetic oligonucleotide probe

<400> 416  
 tcaacccctg accctttcct a 21

<210> 417  
 <211> 24  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Synthetic oligonucleotide probe

<400> 417  
 ggcaggggac aagccatctc tcct 24

<210> 418  
 <211> 20  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Synthetic oligonucleotide probe

<400> 418

P1618P2C2 sequence listing.txt

gggactgaac tgccagcttc 20

<210> 419

<211> 22

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic oligonucleotide probe

<400> 419

gggccctaac ctcattacct tt 22

<210> 420

<211> 23

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic oligonucleotide probe

<400> 420

tgtctgcctc agccccagga agg 23

<210> 421

<211> 21

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic oligonucleotide probe

<400> 421

tctgtccacc atcttgccctt g 21

<210> 422

<211> 3554

<212> DNA

<213> Homo Sapien

<400> 422

gggactacaa gccgcgccgc gctgccgctg gcccctcagc aaccctcgac 50

atggcgctga ggcggccacc gcgactccgg ctctgcgctc ggctgcctga 100

cttcttcctg ctgctgcttt tcaggggctg cctgataggg gctgtaaatc 150

tcaaatccag caatcgaacc ccagtggtag aggaatttga aagtgtggaa 200

ctgtcttgca tcattacgga ttcgcagaca agtgacccca ggatcgagtg 250

gaagaaaatt caagatgaac aaaccacata tgtgtttttt gacaacaaaa 300

ttcagggaga cttggcgggt cgtgcagaaa tactggggaa gacatccctg 350

aagatctgga atgtgacacg gagagactca gccctttatc gctgtgaggt 400

cgttgctcga aatgaccgca aggaaattga tgagattgtg atcgagttaa 450

ctgtgcaagt gaagccagtg acccctgtct gtagagtgcc gaaggctgta 500

ccagtaggca agatggcaac actgcactgc caggagagtg agggccaccc 550

P1618P2C2 sequence listing.txt

ccggcctcac tacagctggg atcgcaatga tgtaccactg cccacggatt 600  
ccagagccaa tcccagattt cgcaattctt ctttccactt aaactctgaa 650  
acaggcactt tgggtgttcac tgctgttcac aaggacgact ctgggcagta 700  
ctactgcatt gcttccaatg acgcaggctc agccagggtg gaggagcagg 750  
agatggaagt ctatgacctg aacattggcg gaattattgg gggggttctg 800  
gttgtccttg ctgtactggc cctgatcacg ttgggcatct gctgtgcata 850  
cagacgtggc tacttcatca acaataaaca ggatggagaa agttacaaga 900  
acccagggaa accagatgga gttaactaca tccgcactga cgaggagggc 950  
gacttcagac acaagtcacg gtttgtgatc tgagaccgcg ggtgtggctg 1000  
agagcgcaca gagcgcacgt gcacatacct ctgctagaaa ctctgtcaa 1050  
ggcagcgaga gctgatgcac tcggacagag ctagacactc attcagaagc 1100  
ttttcgtttt ggccaaagtt gaccactact cttcttactc taacaagcca 1150  
catgaataga agaattttcc tcaagatgga cccggtaaata ataaccacaa 1200  
ggaagcgaaa ctgggtgcgt tcactgagtt gggttcctaa tctgtttctg 1250  
gcctgattcc cgcagttagta ttagggtgat cttaaagagt ttgctcacgt 1300  
aaacgcccgt gctgggccct gtgaagccag catgttcacc actggtcggt 1350  
cagcagccac gacagcacca tgtgagatgg cgagggtggct ggacagcacc 1400  
agcagcgcat cccggcggga acccagaaaa ggcttcttac acagcagcct 1450  
tacttcatcg gcccacagac accaccgcag tttcttctta aaggctctgc 1500  
tgatcgggtg tgcagtgtcc attgtggaga agcttttttg atcagcattt 1550  
tgtaaaaaca accaaaatca ggaaggtaaa ttggttgctg gaagagggat 1600  
cttgccctgag gaaccctgct tgtccaacag ggtgtcagga ttttaaggaaa 1650  
accttcgtct taggctaagt ctgaaatggg actgaaatat gcttttctat 1700  
gggtccttggt tattttataa aattttacat cttaaatttt gctaaggatg 1750  
tattttgatt attgaaaaga aaatttctat ttaaactgta aatatattgt 1800  
catacaatgt taaataacct atttttttta aaaagttcaa cttaaggtag 1850  
aagttccaag ctactagtgt taaattggaa aatatcaata attaagagta 1900  
ttttacccaa ggaatcctct catggaagtt tactgtgatg ttccttttct 1950  
cacacaagtt ttagcctttt tcacaaggga actcatactg tctacacatc 2000  
agaccatagt tgcttaggaa acctttaaaa attccagtta agcaatgttg 2050  
aaatcagttt gcatctcttc aaaagaaacc tctcaggtta gctttgaact 2100  
gcctcttcct gagatgacta ggacagtctg tacccagagg ccacccagaa 2150

P1618P2C2 sequence listing.txt

```

gccctcagat gtacatacac agatgccagt cagctcctgg gggtgcgcca 2200
ggcgcccccg ctctagctca ctgttgccctc gctgtctgcc aggaggccct 2250
gccatccttg ggccctggca gtggctgtgt cccagtgagc tttactcacg 2300
tggcccttgc ttcattccagc acagctctca ggtgggcact gcagggacac 2350
tgggtgtcttc catgtagcgt cccagctttg ggctcctgta acagacctct 2400
ttttggttat ggatggctca caaaataggg cccccaatgc tatttttttt 2450
ttttaagttt gtttaattat ttgttaagat tgtctaaggc caaaggcaat 2500
tgcgaaatca agtctgtcaa gtacaataac attttttaaaa gaaaatggat 2550
cccaactgttc ctcttttgcca cagagaaagc acccagacgc cacaggctct 2600
gtcgcatttc aaaacaaacc atgatggagt ggcggccagt ccagcctttt 2650
aaagaacgtc aggtggagca gccagggtgaa aggcctggcg gggaggaaag 2700
tgaaacgcct gaatcaaaag cagttttcta attttgactt taaatttttc 2750
atccgccgga gacactgctc ccatttgtgg ggggacatta gcaacatcac 2800
tcagaagcct gtgttcttca agagcagggtg ttctcagcct cacatgccct 2850
gccgtgctgg actcaggact gaagtgtgtt aaagcaagga gctgctgaga 2900
aggagcactc cactgtgtgc ctggagaatg gctctcacta ctcaccttgt 2950
ctttcagctt ccagtgtctt gggtttttta tactttgaca gctttttttt 3000
aattgcatac atgagactgt gttgactttt tttagttatg tgaaacactt 3050
tgccgcaggc cgcttggcag aggcaggaaa tgctccagca gtggctcagt 3100
gctccctggg gtctgtctga tggcatcctg gatgcttagc atgcaagttc 3150
cctccatcat tgccaccttg gtagagaggg atggctcccc accctcagcg 3200
ttggggattc acgctccagc ctctttcttg gttgtcatag tgatagggtg 3250
gccttattgc cccctcttct tataccctaa aaccttctac actagtgcc 3300
tgggaaccag gtctgaaaaa gtagagagaa gtgaaagtag agtctgggaa 3350
gtagctgcct ataactgaga ctagacggaa aaggaatact cgtgtatttt 3400
aagatatgaa tgtgactcaa gactcgaggc cgatacgagg ctgtgattct 3450
gcctttggat ggatgttgct gtacacagat gctacagact tgtactaaca 3500
caccgtaatt tggcatttgt ttaacctcat ttataaaagc ttcaaaaaaa 3550
ccca 3554

```

<210> 423  
 <211> 310  
 <212> PRT  
 <213> Homo Sapien



P1618P2C2 sequence listing.txt

<400> 423

```

Met  Ala  Leu  Arg  Arg  Pro  Pro  Arg  Leu  Arg  Leu  Cys  Ala  Arg  Leu
 1      5      10      15
Pro  Asp  Phe  Phe  Leu  Leu  Leu  Leu  Phe  Arg  Gly  Cys  Leu  Ile  Gly
      20      25      30
Ala  Val  Asn  Leu  Lys  Ser  Ser  Asn  Arg  Thr  Pro  Val  Val  Gln  Glu
      35      40      45
Phe  Glu  Ser  Val  Glu  Leu  Ser  Cys  Ile  Ile  Thr  Asp  Ser  Gln  Thr
      50      55      60
Ser  Asp  Pro  Arg  Ile  Glu  Trp  Lys  Lys  Ile  Gln  Asp  Glu  Gln  Thr
      65      70      75
Thr  Tyr  Val  Phe  Phe  Asp  Asn  Lys  Ile  Gln  Gly  Asp  Leu  Ala  Gly
      80      85      90
Arg  Ala  Glu  Ile  Leu  Gly  Lys  Thr  Ser  Leu  Lys  Ile  Trp  Asn  Val
      95     100     105
Thr  Arg  Arg  Asp  Ser  Ala  Leu  Tyr  Arg  Cys  Glu  Val  Val  Ala  Arg
     110     115     120
Asn  Asp  Arg  Lys  Glu  Ile  Asp  Glu  Ile  Val  Ile  Glu  Leu  Thr  Val
     125     130     135
Gln  Val  Lys  Pro  Val  Thr  Pro  Val  Cys  Arg  Val  Pro  Lys  Ala  Val
     140     145     150
Pro  Val  Gly  Lys  Met  Ala  Thr  Leu  His  Cys  Gln  Glu  Ser  Glu  Gly
     155     160     165
His  Pro  Arg  Pro  His  Tyr  Ser  Trp  Tyr  Arg  Asn  Asp  Val  Pro  Leu
     170     175     180
Pro  Thr  Asp  Ser  Arg  Ala  Asn  Pro  Arg  Phe  Arg  Asn  Ser  Ser  Phe
     185     190     195
His  Leu  Asn  Ser  Glu  Thr  Gly  Thr  Leu  Val  Phe  Thr  Ala  Val  His
     200     205     210
Lys  Asp  Asp  Ser  Gly  Gln  Tyr  Tyr  Cys  Ile  Ala  Ser  Asn  Asp  Ala
     215     220     225
Gly  Ser  Ala  Arg  Cys  Glu  Glu  Gln  Glu  Met  Glu  Val  Tyr  Asp  Leu
     230     235     240
Asn  Ile  Gly  Gly  Ile  Ile  Gly  Gly  Val  Leu  Val  Val  Leu  Ala  Val
     245     250     255
Leu  Ala  Leu  Ile  Thr  Leu  Gly  Ile  Cys  Cys  Ala  Tyr  Arg  Arg  Gly
     260     265     270
Tyr  Phe  Ile  Asn  Asn  Lys  Gln  Asp  Gly  Glu  Ser  Tyr  Lys  Asn  Pro
     275     280     285
Gly  Lys  Pro  Asp  Gly  Val  Asn  Tyr  Ile  Arg  Thr  Asp  Glu  Glu  Gly
     290     295     300
Asp  Phe  Arg  His  Lys  Ser  Ser  Phe  Val  Ile

```

<210> 424  
<211> 39  
<212> PRT  
<213> Artificial sequence

<220>  
<223> EGF Receptor Motif

<220>  
<221> Unsure  
<222> 1, 3-9, 11-15, 17-26, 28, 30-34, 36-37, 39  
<223> Unknown amino acid

<400> 424  
Xaa Cys Xaa Xaa Xaa Xaa Xaa Xaa Xaa Cys Xaa Xaa Xaa Xaa Xaa  
1 5 10 15  
Cys Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Cys Xaa Cys Xaa  
20 25 30  
Xaa Xaa Xaa Xaa Gly Xaa Xaa Cys Xaa  
35